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OPEN LETTER TO THE MEMBERS OF THE BRITISH INSTITUTE OF PHILOSOPHICAL STUDIES

AFTER the disturbing announcements of previous communications, the Executive Committee thinks it owes to the members of the Institute that they should be apprised of the measures that have been taken to deal with the crisis caused by the sudden death of Mr. Emile Garcke, who was so generous a supporter. As a result of that event the Committee found itself committed to an expenditure which would leave a deficit at the end of the year ended March 31, 1931, of approximately £1,000. Two problems faced the Committee: first, that of providing for this deficit; secondly, that of reducing expenditure for succeeding years so as to keep it within the limits of present income.

With a view to the solution of the former of these problems, the letter which the members received in January of this year was issued asking for donations. The sum received in response amounted to about £400, and this was an encouraging indication of the interest of members in the work of the Institute. In addition to this sum, some special donations were conditionally promised amounting to £350. There was still a gap to be filled, but through the exertions of the Director of Studies an anonymous friend of the Institute has given a donation of £500, which will enable the Institute to meet all its obligations and look forward with hope to the future.

But that this hope should be realized it was necessary to face the second of the above problems, and a Sub-Committee of the Executive was formed to report on the possibility of reducing expenditure without materially impairing the work of the Institute. Its recommendations fell under the four main heads: of economies in

the printing and publishing of the *Journal*; in the payments for lectures; in rent of the premises in Gordon Square; and in the salaries of officers. Owing to the loyal spirit in which these proposed economies were accepted by all concerned, the generous offer of unpaid courses by some of the academic members of the Institute, and the liberal proposal by the Trustees of University Hall of reduced terms for the offices in that building, we think we see our way to begin the new Session in October with but little if any diminution in the extent or efficiency of the work previously undertaken. But in writing this letter to members we desire, while warmly thanking them for their support under specially trying circumstances in the past, to remind them that success in the future will depend entirely upon the continuance of that support, and particularly on a substantial increase of membership. The Executive hopes to take special measures to secure that object, but its main reliance is on the efforts of the members themselves. If each made himself responsible for one additional member the finances of the Institute would be placed on a securer basis than they have yet attained, and the crisis through which we have passed would prove in the end to have been a consolidating and strengthening experience.

Speaking for the Council and the Executive, we would add that nothing that has occurred has shaken our faith in the importance and entire practicability of the work we have taken in hand, namely, of opening the opportunity of philosophical culture to a wider public than has hitherto been able to enjoy it.

JOHN H. MUIRHEAD,
HERBERT SAMUEL,
for the Council.

SUBJECTIVE AIM IN PROFESSOR WHITEHEAD'S PHILOSOPHY

PROFESSOR C. LLOYD MORGAN

IN *Process and Reality* Professor A. N. Whitehead formulates a Cosmology which embodies a resolute attempt to combine in one philosophical synthesis a scientific account of Concrescence with a metaphysical explanation thereof in terms of Creativity.

I seek here to play the part of a commentator who approaches this cosmology through the avenue of comparative psychology.

I

One who comments on the thesis of a colleague may be permitted to state at the outset the chief tenets of his own philosophical creed.

In the A B C of my philosophy I place under the heading A all Agency or Activity, creative or directive; under B all physical events to be discussed in terms of their Behaviour; and under C all mental occurrences of which Consciousness in us is the most salient example.

These three are inseparable, though each may be distinguished from the others, and may be discussed in abstraction from the others. In this sense each forms a 'closed system.' But only in abstraction from the others. The aim of the philosopher is to rise above such abstraction and to see all physical events, all mental occurrences, and all forms of agency as one whole within which all instances of A, B, and C shall be included.

None the less, we do well to use abstractions as the steps by which to rise above them that we may see all things wholly, so long as we bear in mind that a 'closed-system' method of inquiry is only a means to the philosophical end we have in view.

Now, as a matter of history, those men of science whose inquiries lie within the closed system of physics have in practice been led —or many of them have been led—to exclude agency from their special field of work as physicists. And taking for granted the mental processes of the observer and the thinker in perceiving and in reasoning, they have handed 'mind' over to the psychologist for discussion within *his* closed system of inquiry.

But those who are at work within that closed system fall into two schools. The members of one school lay emphasis on the agency of mind. The members of the other school regard all explanation in terms of such agency as beyond the scope of the science of psychology.

As a policy of method I choose the latter course. In other words, modern comparative psychology as such has, for me, no more concern with agency than has modern physics.

On this understanding there are, broadly speaking, two main provinces of natural science—physics and psychology. These I label B and C respectively. In biology they are so intimately co-related that, given such-and-such physical events in one closed system, concomitant mental occurrences in the other can (even now) in large measure be inferred. None the less, they may be distinguished. But biologists fall into two schools. The members of one school invoke agency, that of Life or Mind, to account for all the physiological processes they observe. Members of the other school are content to record their observations and to formulate generalizations in terms of which these observations may be interpreted. As a policy of scientific method I subscribe to the tenets of the latter school; and I distinguish a physical and physiological body-story under B from a psychological mind-story under C.

Each story deals with 'concrescence,' which, as I read it, is advance through new products to further novelty—physical products in this story, mental products in that.

But here, as commentator on Mr. Whitehead's text, I am faced by a difficulty. I elect to use *different* words in the universe of discourse of this story and of that—to reserve, for example, the words 'experience' and 'feeling' for primary use only in a psychological context. Mr. Whitehead elects to use these words in a much wider sense so as to do duty in both contexts. He speaks, for example, of a 'percipient event' in the body. I reserve the word 'percipient' for use in mind-story only. In the body there is, I should say, a *recipient* event consequent on the stimulation of specialized 'receptors.' For me all recipience is physical; all percipience is mental. The so-called 'avenues' of sense are paths of recipience to be interpreted physically and physiologically. I should not speak, with Locke, of ideas 'conveyed in' by 'the senses.'

In distinguishing 'creativity' under A from 'concrescence' under B or C, I am fully prepared to follow Mr. Whitehead. And yet we both seek to include them in one philosophical synthesis which shall do justice alike to natural science and to the metaphysics of agency. But here, too, there are verbal difficulties which centre in the word 'cause.' Mr. Whitehead proclaims from the house-top of his system that we can give no metaphysical explanation of any new step onwards in concrescent advance, or any subsequent recurrence of like events, unless we fully reinstate causality, both efficient and final, in its rightful position of metaphysical pre-eminence. Under the ban of science they have been ousted from what purports to be a comprehensive cosmology—as he thinks with disastrous results.

None the less, I, for one, should still exclude causality, final or efficient, from the council-chambers of natural *science*. I should speak of the so-called 'laws of causation' in science as 'laws of relatedness,' on the understanding that both physical and mental relatedness are included on like terms. If relatedness suffices for the scientific interpretation of all concrescence under the headings B and C, may we not reserve the word 'cause' for use only in that metaphysical universe of discourse in which agency plays the title-rôle?

II

Near the outset of *Process and Reality* Mr. Whitehead lays much stress on 'dipolar prehension.' In any instance of prehension, he says, there are three factors: (*a*) the subject which is prehending; (*b*) the datum prehended; and (*c*) the 'subjective form' which is *how* that subject prehends that datum.

He then introduces the word 'superject.' The datum, he says, is superjective at one pole and implies the subject at the other pole. Hence the word 'subject' may always be construed as 'subject-superject.'

Thus far the psychologist, as man of science, may find little difficulty, at any rate on first inspection. He may suppose that 'dipolarity' merely re-names the distinction he is wont to draw between subject and object. But he must probe deeper.

In Mr. Whitehead's usage the word 'object' has metaphysical import. It is that which is 'ingressive' into an 'actual entity or occasion.' It is 'eternal' in 'potentiality,' whereas the actual occasion is passing and perishing. We have therefore to distinguish two kinds of dipolar prehension: 'physical prehension' between actual entities, and 'conceptual prehension' of eternal objects.

Such use of the words 'physical' and 'conceptual' gives pause to the psychologist. He commonly reserves the latter for use only at the reflective level of concrescence in human thought. Not so in Mr. Whitehead's usage. It is applicable at all levels of 'experience,' including those which lie far below the level of that which he speaks of as 'conscious.' It is applicable comprehensively to the interpretation of 'experience' of the week-old infant; of the embryo in the womb; of each molecule therein or elsewhere. Conceptual prehension is universal in its range. It is in this metaphysical or ultimate sense that 'subject-superject' comes into the philosophical picture. It is in this creative sense, as I understand, that 'subjective form' should be construed.

In Mr. Whitehead's philosophy the eternal objects which are ingressive into actual occasions of concrescence subserve subjective creativity in the category of the ultimate. Creativity is the 'principle

of novelty,' the producer of all that is new in concrescent advance. In the fluent world of actual occasions concrescence is, he says, inherent in the constitution of each particular entity. But apart from creativity, each actual entity momentarily perishes as such. Under repetition, however, it is succeeded by another on some line of advance. Hence there is 'transition' in fluency. Concrescence proceeds toward the final cause which is the 'subjective aim'; transition is the vehicle of the efficient cause which is the 'immortal past.'

It seems, then, that subjective aim is always central. And when we pass to further detail, such words as 'appetition,' 'end,' 'ideal,' 'satisfaction,' and 'purpose' are introduced to fill in the 'conceptual' picture.

So closely interwoven is the texture of Mr. Whitehead's thought that it is not easy to summarize his thesis without omitting relevant qualifications. Let me try to do so in brief.

Take some concrescent process. Metaphysically underlying this process from outset to outcome there is subjective aim in ultimate creativity; and that which is aimed at is the superjective end, with subjective satisfaction in its attainment. Any such process is in accord with the whole order of nature, which, as such, is differentiated from mere 'givenness' by the introduction of 'adaptation' for the attainment of some end. When this end is reached there is fulfilment of the primordial appetition which is the basis of all order. We have here the 'dominant ideal' that creatively inspires the given process of concrescence. The full ideal, however, is only partially attained owing to the inclusion of some measure of disorder, with like measure of dissatisfaction. Notwithstanding this occasional missing of the mark, the subjective aim at satisfaction constitutes the final cause or 'lure' whereby there is determinate concrescence; and the satisfaction attained is an element in the content of creative purpose.

All this holds good for any process of concrescence in molecule no less than in man. Underlying every actual *Process*, as fluent, is creative *Reality*, as eternal.

III

Permit me now to supplement the ABC of my philosophy by adding some account of the '1, 2, 3' of my psychology under C, namely, that branch of natural science which deals genetically and comparatively with the mentality of concrescent organisms.

On these terms, apart from such mentality as we may impute or attribute to others than ourselves, one turns to first-hand experience as it is disclosed in and to oneself. I find in myself three salient 'levels' of mentality which I can *analytically distinguish*—sentient;

perceptive; and reflective. These I label 1, 2, and 3. Let me take them in analytic order downwards.

3. At the reflective, or self-conscious, level I find generalized 'ideas' with correlative 'feelings.' I here use the word 'ideas' in the wide Lockian sense. Reflective ideas are those to which there is reference on my part when I am thinking—I include under the word 'feeling' my enjoyment or awareness in so thinking.

Chief among the reflective ideas that I find are those which have reference to a self—myself or another—and to a space-time frame of events. In typical reflection in daily life there is reference of self to some 'place' in this frame of reference.

2. At the perceptive, or conscious, level of my mentality I can analytically distinguish much that is going on all day long in which there is no reflective reference to self and no space-time scheme of events to which past or future occasions are reflectively referred. There is only that which occurs within the current now-occasion of the passing moment of action. But I find on any 'now-occasion' what I speak of as 'fore-experience' of that which I reflectively interpret as 'just-coming'—fore-taste, for example, as I raise a cup of coffee to my lips. This, no doubt, I *reflectively* interpret as a mental bequest of what *has* come on previous occasions of like nature. But I have not *perceptively* in mind, there and then, either retrospective reference to some *past* occasion, or prospective reference to some *future* occasion, in a space-time scheme. Fore-experience as such is adjunct to some *this* occasion.

1. At the sentient, or subconscious, level I find no such fore-experience. There is only the mental accompaniment of those fundamental processes, physical and physiological, which afford the bare data of 'experience.' There is just a colour, a touch, a smell, a twinge, a sentient somewhat, and so on; perhaps only feeling 'fit' or 'all-overish'; abstracted from the 'meaning' each conveys.

Under 1, 2, and 3 the emphasis here falls on temporal relations. And since we live forwards (though reflectively we may think backwards with reference to past occasions), the main stress in interpreting the psychological '1, 2, 3' is in forward regard. Hence one may say: In reflection there is prospective reference to some future occasion; in perception, fore-experience on some this-occasion; in sentience, as such, no time-reference—only some perishing 'now.'

In my first-hand experience I find mental occurrences at all three levels, normally going on concurrently, hand-in-hand. In their fluent relatedness they constitute my adult mentality.

I pass now to imputation. By this I mean the attribution of mentality at some level, or levels, to someone other than myself. I include under 'someone' an infant, an amœba, and (speculatively no doubt) perchance a molecule.

In reflective scrutiny I discern no such evidence as leads me to impute mentality at all three levels even to all living organisms. To the fœtus during the months before birth I impute sentience only. To the infant from birth to about two and a half years I impute perception also. Not till then, and thence onwards in increasing measure, do I impute reflective mentality. In terms of mentality I classify animals as (1) sentient only, (2) perceptive also, and (3) incipiently reflective (some apes).

Here let me pause. I speak *analytically* of 'levels' of mentality in some given organism. In myself only have I such first-hand experience as can be submitted by me to first-hand analysis. It is 'distinguishing' analysis, not 'separating' analysis, where that which is submitted to such drastic treatment is thereby destroyed. It is analogous to that which Sir Wm. Bragg applies to a crystal that he may disclose the rôles which molecules and atoms play in that crystal *as an intact whole*, where events are going on simultaneously at different 'levels.'

Genetically I speak of 'stages' of mentality.

A canon of genetic interpretation which I have been led to accept is this: Since in concrescent order stage 3 follows 2, and this follows 1, it is not in accordance with sound scientific method to render an account of what happens at a lower stage of advance in terms appropriate to the interpretation of events at a higher level which has not yet been reached.

In the genetic order of concrescent advance reflection is more than perception; perception more than sentience. Here the 'more than' discloses concrescent novelty. But the reflective person is also perceptive; and, as perceptive, he is also sentient. The 'more than' involves the 'also.' Sentience, however, does not imply perception; nor does perception imply reflection. There is a natural order of mental concrescence in the advance of evolutionary process and in that of individual development.

IV

Having indicated my psychological outlook, I now come back into touch with Mr. Whitehead—into intimate touch with subjective aim and satisfaction in psychological regard.

From this point of view each includes a mode of awareness in enjoyment—awareness in aiming in one case, awareness in feeling satisfied in the other case. But subjective aim implies reference to an end in view, now aimed at but not yet attained; satisfaction implies reference to a precedent end in view, then aimed at and now attained.

On these terms, however, the whole procedure is typically reflec-

tive on the part of some person. There are two phases in the procedure: a precedent phase when he is looking forward with prospective reference and aiming with appetition; a subsequent phase when he is looking backward with retrospective reference and feeling satisfied in the attainment of the precedent end.

To a merely sentient creature I impute no such subjective aim on his part, and therefore no correlative satisfaction. When a flash makes me blink, what happens may be interpreted if we allow little, if anything, more than belongs to the sentient level of mentality. There is, so far as I can introspectively discover, no subjective aim on my part. Blinking 'with the eyelids' has, no doubt, as its sentient accompaniment, awareness in so behaving. But I should not speak of this as 'satisfaction' if there be no retrospective reference to a precedent end in view which was then prospectively aimed at and is now attained.

This takes us down to a level of mentality at which, as I believe, no subjective aim has taken form in the process of concrescence. But, just now, we are concerned with that later stage of genetic advance at which subjective aim *has* taken form, perhaps as a dominant ideal.

Thus far one rests content with regarding subjective aim and consequent satisfaction as late incidents in the course of mental concrescence. Until the reflective stage of mentality is reached they are not yet in evidence. Thus far, however, they are left unexplained. To account for them—and not merely to render a generalized account of them—we must introduce the metaphysics of that creative agency to which their origin is due. Mr. Whitehead does so under the covering notion of 'objectification.' Here we have not only actual relatedness but potential causality of which the relational world disclosed by science is the expression. In the actual world, objectification constitutes the efficient cause through which any new stage of concrescence arises. But the subjective aim, as 'conceptual,' constitutes the final cause whereby there is determinate concrescence at any stage of advance. And the satisfaction that results remains as an element in the content of creative purpose. Philosophically to explain concrescence, an 'urge' onwards and a 'lure' forwards are metaphysically demanded.

Even so, I submit that, in an abstractedly scientific interpretation of concrescence, neither urge nor lure should be invoked. Under that policy of method which I accept, cause, efficient or final, is relegated to the metaphysics of agency. Concrescence is interpreted in terms of relatedness. In this interpretation we are concerned only with "the relations of states of things in the actual world"—as Mr. Whitehead puts it.

In the course of mental concrescence one is led up to 'teleological

relatedness,' which may be psychologically characterized as that mode of reflective relatedness which comprises prospective reference to an end in view. As psychologist, I entertain no doubt that such teleological relatedness there is—a very late outcome of concrescent process when the stage of reflection has been reached. As psychologist, I entertain no doubt that there is, on the part of each human person, subjective aim, end in view, dominant ideal, and eventual satisfaction (if all goes well). As psychologist, however, I am content to render such scientific account as I can of those modes of relatedness which I find within this process of reflective concrescence, and of that state of affairs which is its outcome. As psychologist, I deal professedly and explicitly with C_3 in my schema. I abstract from B and from A, save in so far as that which they severally comprise is 'represented' or 'symbolized' 'by way of idea'—to adopt Berkeley's phrase.

But Mr. Whitehead bids us rise above such abstract treatment and embrace A, B, and C within one comprehensive synthesis. As complementary to concrescence he lays stress on creativity, with ingression of eternal objects, and with conceptual prehension by the potentially creative subject, to explain or account for the fluent actuality that we find.

When I seek to follow his lead and to work things out on his lines, I am somewhat 'embrangled in difficulties.' For psychology, teleological relatedness is a very late outcome of a long process of actual concrescence. It is discussed, let us say, in terms of subjective aim and satisfaction, with prospective and retrospective reference, within a space-time frame.

We then pass from psychology to metaphysics. We introduce or reinstate the category of creativity. And here also what we are said to find is, again, subjective aim and satisfaction. That which comes last in temporal process, on one highly specialized line of concrescent advance, is given metaphysical priority with eternal being as potential in the content of creative purpose. In brief, we are invited to identify teleological relatedness as concrescent with final causality as creative.

Now those who have been led to believe in some agency creative and directive of the course of events in the actual world, have commonly regarded such identification as legitimate. Others have harboured grave doubts, centred perhaps in the question: Is not this too anthropomorphic? A doctrine of concrescence tends to emphasize these doubts. How so?

Take concrescence in man. There has been advance through new products towards further novelty. We reach subjective aim as psychologically interpreted. But the process of concrescence will, for long ages to come, continue its advance towards further novelty.

What this further novelty may be the future will disclose. We cannot foretell. It may be something far 'more than' subjective aim in human mentality.

If, then, we grant that in some way future novelty lies open to the all-embracing vision of that creativity which is "the producer of all that is new in concrescent advance," must not any description couched in terms of subjective aim be—as Bradley might have said—so 'infected by' psychological concrescence as to be quite inadequate as applied in the metaphysical category of the ultimate and the eternal, since it is through and through timeful with prospective reference, and since, in the actual world, it is, so far as we know, applicable only to men and some few of their congeners?

In fine: if we discuss subjective aim in terms of teleological relatedness as, with its many shortcomings, the highest as yet attained in the concrescent advance of mankind, let us remember that it may, and as many believe does, fall so far short of that which has being in the ultimate category of creativity as to call for some other name by which it should be designated. I impute without hesitation subjective aim, as psychologically defined in relational terms, to human folk when they have reached a high status of concrescent mentality. But I question whether one is justified in imputing subjective aim, as thus characterized, to that mentality which Mr. Whitehead attributes to creativity.

Nay, more. I question the advisability of using the word 'mentality' in the context of creativity. I should reserve it for use in the context of concrescence. And this, not because I deny to creativity the potentiality of producing all the novelty that we find in the course of concrescent advance, including new stages of mentality, but because I doubt whether the promise and potency of concrescent mentality necessarily implies mentality as an attribute of creativity itself in the category of the ultimate.

In brief, and in terms of my A, B, C, I distinguish concrescent mentality in C from creative activity in A, and do not transfer that which characterizes C to A or that which characterizes A to C. I regard subjective aim as characterizing C_3. And, unless it be radically re-defined, say in terms which Mr. Whitehead designates 'conceptual,' its transference to A seems to me to annul the distinction between C and A.

V

From the psychological standpoint subjective aim falls under my heading C_3. But in the metaphysics of creativity that to which Mr. Whitehead gives the same name is objectified at all stages of concrescence.

I pass now to C_2 at the perceptive level of mentality. And in

this section I try to keep within the closed system of C in abstraction from that of B (physical) and that of A (metaphysical).

If I may use the word 'idea' in the wide Lockian sense, then, for me, all mental reference in perception is to ideas. Following Berkeley, I say that what is perceived is in mind 'by way of idea,' as distinguished from that which is in mind 'by way of attribute,' or (as I should say) by way of feeling. I use the word 'feeling' here in a restricted C-sense. Moreover, I speak of 'reference *to*' ideas, and of 'awareness *in*' feeling.

It may be said that this 'reference to' is what others name 'apprehension of.' Psychologically this is not so. That to which there is psychological reference is some idea in mind. That of which there is said to be direct apprehension—with stress on the word 'direct'—is some physical thing or event. On these terms, since that which is thus apprehended in perception is physical, one steps outside the closed system of mind; and since apprehending is mental, one steps outside the closed system of physics.

We thus reach a parting of the philosophical ways. Briefly stated in its historical setting the question long ago arose: Do perceptive ideas exactly *resemble* or do they only serve to *represent* what in either case we speak of as the 'sensible qualities' of things in the external world? Locke replied: Some are resemblant and some are not. Thus he drew, or accepted, a distinction between 'primary' and 'secondary' qualities. Then came Berkeley. This distinction, he said, is invalid; all perceptive ideas are representative only. Hume followed suit. Enter Reid. Not representative only, he says; resemblant in all those ways in which common sense assures us that they are so.

An old story this, but still a live issue. In more modern setting, and in terms of closed systems, the question is: Are our minds as perceptive so clean up against things in the external world as to justify the belief that colours, shapes, distances from us, and so forth, are directly apprehended? If so, since resemblance is merged in identity, it follows that these 'qualities' are what they are, and as they are, within B, whether they are apprehended by someone or not. This in effect takes us back to common-sense Reid. The alternative belief takes us back a step farther to Hume.

There lies the parting of the ways. It should be remembered, however, that to account for all so-called 'qualities' Mr. Whitehead postulates (under my heading A) eternal objects which are in such wise ingressive into actual entities as to give 'subjective form' to the 'conceptual prehension' of colours and shapes and distances. Herein lies the metaphysical pivot of his thesis. But just now this does not come within the psychological scope of this section.

Let me, then, revert to Thomas Reid. He relies on the assurance

of common sense. This assurance he speaks of as 'instinctive.' His commentator, Hamilton, substitutes the word 'intuitive.' Here the psychologist has something to say, since intuition for him implies a mental process and its product.

I take as an instance of perception the naïve location of an object just *there* in that which we reflectively interpret as spatial relatedness to other neighbouring objects and to the body of him that perceives. Have we an intuition of visual 'thereness'? Has a month-old infant a like intuition? I suppose that most of us would reply that in some sense he has. But in what sense? Some would say: In the sense that so to perceive an object is 'originally' given in the very nature of mind. I should say: Only in a 'derivative' sense as that which is acquired in the course of individual experience.

There are, I should say, two modes of sentient 'awareness in feeling' when there is reference by way of idea to an object as 'there' for visual perception, namely, (i) awareness in retinal sensing, and (ii) awareness in behaving, as the gaze is directed towards and focussed on the object. These two sets of feelings combine when anything is perceived as 'out there.' So too in all 'active touch,' tactual feelings and motor feelings similarly combine. Furthermore, as Berkeley showed, 'active sight' and 'active touch' normally combine in richer perceptive synthesis. Hence reference to spatial position is not original (nativistic) but acquired. It arises in the course of individual experience as a new product of associative concrescence and gives perceptive 'fore-experience' of spatial thereness on each 'now-occasion' as it comes in the normal life of perception.

Of this new product of associative concrescence one may say, as Professor Höffding (interpreting James Mill) said thirty years ago: "Several ideas and feelings may enter into so intimate a union with one another as to become inseparable, while the new totality, thus formed, possesses qualities which are not possessed by any of its parts." And he adds that the new totality can 'become' what James Mill spoke of as 'a substantive principle of human nature.' Of like concrescent origin, as I believe, are all forms of common-sense intuition in the perceptive field of reference. One and all are derivative and individually acquired.

I lay stress on the *perceptive* field because in the reflective field, as interpreted by modern physics, we have far outrun the range of common-sense intuition. In this field every step in advance takes us farther from resemblance towards that mathematical symbolism which is the reflective form of representation. Here the plain man finds much that runs counter to the cherished 'intuitions' of common sense. Only when we come back to the platform of everyday life in naïve perception is he bidden still to accept direct apprehension as

part of his philosophical creed on the sufficient evidence of common sense—to tread the path of Thomas Reid and not that of David Hume.

VI

Whether one elects to tread this path or that in the world of daily acquaintance, one is faced by questions with respect to the characterizing features of this naïve perceptive acquaintance. On these characterizing features Mr. Whitehead has a good deal to say.

In approaching them as psychological commentator, let me go back to Hume, brought up to date by those who have followed his lead. He was predominantly, but not only, concerned with what Mr. Whitehead speaks of as 'presentational immediacy,' as this is given through the traditional five senses, by which, as Locke had supposed, ideas are in some way 'conveyed in' to the mind. But Mr. Whitehead contends that this is not the whole story. There is also 'causal efficacy'. This, he says, "is not that sort of perception which has received most attention in the philosophical tradition. Philosophers," he tells us, "have disdained the information about the universe obtained through these visceral feelings and have concentrated attention on visual feelings."

Here the word 'feelings' is used in that widely extended sense which enables them to play a part in the system of physics. Thus used, Mr. Whitehead can apply to feelings the professedly physical notion of 'vector character.' I use the word 'feelings' in a psychological sense to name modes of mental awareness in experiencing. But, for Mr. Whitehead, causal efficacy goes deeper. It emphasizes 'conceptual prehension.' It must be taken in the light of 'subjective form' and 'subjective aim' in the ultimate category of creativity. There let us leave them for a while and revert to psychological treatment.

When an infant's gaze turns, soon after his birth, to a softly illuminated patch in the visual field, I impute to him awareness in so behaving 'with the eyes.' And when a flash makes me blink, I am aware in thus behaving 'with the eyelids.' This leads one to distinguish a factor in experience which we may name 'motor feeling' as concomitant with behaving. Thus we have sensory feelings in seeing with the retina, and motor feelings in behaving (accommodating and focussing) with the muscles within and around the eyeballs. These, as was shown in the foregoing section, may perceptively combine.

But when a vivid flash of lightning makes me blink, my whole body is more or less affected—heart-beat, respiration, alimentary system, glandular system, and the rest. Let us speak of all this as accompanied by 'visceral feeling,' which, at the perceptive level, shall include all feeling that is other than sensory and other than

motor. It will include, for example, the sensory feeling one has when one cries 'with the lachrymal glands.' Rather loosely, but to subserve the purpose in hand, one may label all such feelings of visceral origin 'emotional.'

On these terms we can distinguish 'feelings' of three kinds: say, visual, visceral, and motor. And we may say that data are thus afforded for three modes of perception: 'presentational,' 'emotional,' and (let me say) 'behavioural.' I think Mr. Whitehead might agree that they may so combine in associative concrescence as to constitute what Professor Höffding speaks of as 'a new totality' with unforeseen novelty in individual experience.

Apart from this, let us now turn to what Mr. Whitehead says with respect to the first two. He urges that "the whole notion of prehension should be inverted. We prehend other actual entities," he says, "more primatively by direct mediation of emotional tone, and only secondarily and waveringly by direct mediation of sense."

But we have also to reckon with the third mode of prehension—that by mediation of 'causal efficacy.' Taking this in the sense of psychological 'mediacy' in motor feelings, and waiving the question which of the three should, in this context, be regarded as primary, secondary, or tertiary, I can come into line with Mr. Whitehead in so far as I, too, believe that, at the perceptive stage of mental concrescence, there is a complex datum derivative in its character as a totality from sense-feelings, visceral feelings, and motor feelings. That is what I should mean by speaking with Hume of seeing 'with the eyes,' or, more generally, of perceiving 'with the body.' It is *with* the whole body—with concomitant events, sensory, visceral, and motor, *in* that body—that we perceive in all three 'modes of mediacy.'

A question here arises, however, with respect to the meaning to be attached to the words 'with the body.' For me the meaning is that mental 'feelings and ideas' are always 'concomitant' with physical and physiological events 'in the body.' This and no more. But is this what Mr. Whitehead means when he uses these words? It is not, as I understand, all that he means. From the metaphysical standpoint of creative agency in the realm of potential reality they are used with that 'conceptual' implication which Mr. Whitehead invites us to attach to 'subject' and 'superject' in the category of the ultimate. In all prehension we have to reckon not only with some concrescent organism, as actual, but with the whole realm of potential reality therein objectified. Here the words 'with the body' are used in an instrumental sense—as concrescent means to the attainment of that conceptual end which is the subjective aim of creativity.

I revert now to that more mundane sense of the words 'with the body' in which they mean 'concomitant with events in the body.' Then it is with the whole body, comprising events, sensory, visceral,

and motor, in that body that we, and many animals, perceive in three modes which are analytically distinguishable, though they normally combine in associative synthesis.

When, however, we pass to 'physical prehension' far below the level of perception—from the case, let us say, of *my* prehending 'with my body' to that of an atom's prehending 'with *its* body'—I must call a halt. In *its* body there is, I submit, no such differentiation as to lend countenance to the belief that a like differentiation of sense-feeling, visceral feeling, and motor feeling has appeared on the scene in the course of concrescent advance.

If perceptive apprehension, under my heading C2, has origin through associative concrescence, and if it implies the differentiation of sensory, visceral, and motor factors in sentience, under C1, I find grave psychological difficulties in accepting a doctrine of 'physical prehension' so universal in its range as to be applicable to crystals, to molecules, to atoms, to electrons—in a word, to all 'sub-living' organisms—in which no differentiation of like factors obtains. Even in the amœba such differentiation seems to be only hazily incipient.

VII

In *Process and Reality* Mr. Whitehead essays the difficult task of combining in one philosophical synthesis concrescent novelty, as actual and temporal, with causal creativity, as potential and eternal. He has in many ways thrown new light from fresh points of view on an old problem. For this all serious thinkers are deeply indebted to him; and among them those whose province it is to deal in psychological terms with the mentality of organisms.

To some few living organisms—the very few that have reached the reflective level of mentality—they impute subjective aim (as they characterize it) with prospective reference, and in due course some measure of reflective satisfaction if the outcome accords with the precedent aim. Any psychological interpretation of such procedure demands full recognition of time-reference. If the time-factor be eliminated, one can make no headway in such interpretation.

But when we turn to metaphysical explanation *sub quadam specie æternitatis*, are we not bidden wholly to eliminate this time-factor? Can we then discuss potential creativity in the same terminology as that which we employ in interpreting actual concrescence at successive stages of human mentality, infantile and adult? It may be that the conditions of the problem are such as to render any psychological interpretation of causal creativity impossible. If that be so, why not say frankly: The terminology here used in discussing the metaphysical problem must be completely divested of all its merely psychological meaning?

COSMIC PURPOSE

Professor J. W. HARVEY

The phrase "Cosmic Purpose" and others akin to it are familiar enough, particularly in the literature of edification. It is the aim of this article to examine the idea the words convey rather more closely than we do in our common use of them; to deflate the expression, so to speak, of those gaseous suggestions of "uplift" which too often hang about it. The question involved is, of course, in what sense, if in any, purpose may be attributed to the Cosmos, to the universe in its totality. And we have to ask, in case the term so used should turn out to be really misused, Is it a sheer error that dissolves away under criticism, or is there some valid core of meaning which may be restated in other terms? If these are well-worn questions, yet the problem is too fundamental for them ever to be altogether trite.

I

It may be best to begin, in Aristotelian fashion, with a summary of certain typical opinions on the matter, those of intelligent but not specially "philosophical" persons. Four such typical standpoints may be considered. They differ markedly from one another, but all have certain points in common, and these I note first.

Every common-sense view about purpose and its place in reality takes for granted, I think, the reality of temporal process. If "purpose" is denied to the Cosmos, it is not because the realization of purposes "takes time." Suggestions that time is "unreal" belong to a phase of thought more metaphysical (or more sophisticated) than that which I am at the moment considering.

Again, I do not think that there would be, at this level, any dispute as to the meaning of "purpose." For a process or a course of events to manifest purpose it would be admitted that there must be a Mind or Spirit capable of looking before and after, and shaping the course of events in order to bring about a future result. An envisaged "ideal" "not-yet" must both have determined and given value to the experienced actual "now," if "purpose" as common sense understands the term is to be admitted. "Blind" purpose, such as instinctive behaviour has been held to exhibit (though this is never wholly "blind"), and such as has been detected by some thinkers in plant life, is, from the standpoint from which I am starting, purpose in a very Pickwickian sense indeed; and with this I am not at present concerned.

Our diverse typical views agree, then, in taking time as real and in the meaning they assign to the notion of purpose. Otherwise they differ. I will call them the views of Smith, Brown, Jones, and Robinson. Smith's position is that of unreflective Christian orthodoxy. "Cosmic" purpose means the supreme overruling purpose of God or "providence," to which all the happenings in nature conform. Its relation to the finite and fragmentary purposes of men is not probably thought out very clearly; but Smith does not doubt that it is a harmonious relation. The best human purposes adumbrate or indicate, however imperfectly, the general nature of the divine purpose. We can at any rate be confident of the direction, though we cannot define the goal. The realization of a completely harmonious social or ultra-social order would probably be the nearest Smith could come to specifying the nature of this end or goal; but he prefers to put it in religious terms as "the realization of the Kingdom of God." He is perhaps content to accept the language of poetry and speak of "a far-off divine event to which the whole creation moves." What he is mainly concerned to maintain is that this divine purpose which the "whole creation" is engaged in realizing is not indifferent to, but corroborative of, man's highest and most earnest endeavours and aspirations. The world is not only through and through teleological, but the "telos" is one which man can in some measure already make his own, and which had he better understanding he could acknowledge to be the end and aim of his truest being.

Brown is a man of a more agnostic temper. He does not deny that the universe may be fundamentally teleological, or even that the "cosmic" purpose may be called in a sense "divine." But if so, it is the purpose of a *deus ignotus*, a *deus absconditus*, and we can in nowise equate or even compare it with any purpose of man. Brown feels, in fact, drawn to emphasize the incommensurableness of cosmic and human teleology. Ends may be—are being—furthered by the universe, but they are not our ends, to which the cosmic process is supremely indifferent, though not, of course (as a sort of inverted anthropomorphism would have it), actively hostile. If he speaks in religious phrase, it will be in the words of the Psalmist: "For my ways are not as your ways, neither are my thoughts your thoughts, saith the Lord." If he adopts the language of the poet, he will say, with Sir William Watson (in that fine agnostic utterance *The Unknown God*): "Though kneeling nations watch and yearn, does the primordial purpose turn?"

A stage farther in the same movement away from the position of Smith is represented by Jones. Jones likes to think of himself as a man of emancipated mind who has outgrown the naïve and unscientific ascription of "purpose" to the universe at large. The

Universe to him is Nature, and Nature is mechanism. Determinism must therefore replace teleology. Man, it is true, has his purposes: Nature provides the firm and assured material basis upon which he may work and with which he may implement them. But there is no extra-human or super-human purpose anywhere, and to use language to that effect is to fall into sentimentalism and self-deception, if not into sheer obscurantism.

The fourth typical view, that of Robinson, is at once a refusal to attribute purpose to the Cosmos and a repudiation of the mechanistic or any other "scientific" scheme which is for Jones the obvious alternative interpretation. The Cosmos as an ordered system disappears. The universe (if even that term may be kept, for Robinson inclines to a defiant pluralism) in its ultimate nature is an overwhelming mystery, parent alike of cruelty, disaster, frustration, and of beauty, joy, and thrilling fruition. If he may toy with the poet's dream that the "dreaming, dark, dumb thing" may become eventually a conscious will, it is for him but a dream. But for Robinson, if there is one thing more childish than the assumption that the inscrutable mystery that is Reality is a benign providence, it is the arrogant claim of "science" that its nature is to be adequately comprehended and formulated in terms of law, order, fixed and regular system.

These four representative opinions, though not by any means equally widely held or equally influential, are all, I think, typical contemporary points of view. For the first and second there is a Cosmic purpose: it means "God's purpose," which is held to be in the former case providential to man, while the latter denies our right to assume that it has any relevance to human concerns. For the third and fourth there is no "cosmic purpose," mechanism being its substitute in the one case and mystery in the other.

II

Consideration of the attitudes I have tried to present above may begin by a dismissal of the fourth, ascribed to my imaginary Robinson. Robinson is a mystic, though a literary and poetical rather than a religious mystic, and his attitude is not really based on rational considerations at all; his conviction upon this matter is part of a thoroughgoing epistemological scepticism as to the power of thought to interpret the nature of reality. He will hardly, therefore, deign to argue upon the question, and we may spare ourselves the trouble of considering his position further. This is not to say that his position is not in some ways the most interesting and challenging of the four; but as the most sceptical of them it would demand separate and lengthy treatment.

Turning to the position of mechanistic determinism, we are dealing with a belief that is put forward and defended on rational grounds. Mechanism excludes teleology: if future events are determined causally by past and present events, and are in principle exactly ascertainable, they cannot (it is maintained) be determined purposefully.

But the prestige of mechanistic determinism has suffered something of an eclipse to-day even among the Scientists, and its claim need not be dealt with at length. In the first place, if "mechanism" is taken in its strictest sense of explanation in terms of mechanics, Mr. Jones, the mechanist, has to be told that he is trying to "have it both ways." The attractiveness of "mechanism" as a key-conception is due to our familiarity with machines, and a machine embodies a "purpose" in the double sense of being the product of an inventive, contriving mind and being itself productive of intended results. In claiming, therefore, to disavow a universal purposiveness as anthropomorphic illusion, and to affirm Nature as a fixed predetermined order, the popular "mechanist" is all the time exploiting a phraseology which carries with it like a sort of penumbra the suggestion—none the less comforting for being kept vague and unanalysed—that this order may, after all, be assumed to mean something, to be "getting" somewhere, to have point and drive and effective purport.

This criticism that a "mechanism" is, literally, a device, and that a device implies an end, is a familiar one enough, but it will be probably dismissed by the mechanists as a verbal quibble. Still, when we have widened the word to the utmost and freed it from the clinging suggestion of "a machine," there is still to be considered the objection that to claim that mechanism excludes teleology is to claim that a "how" can exclude a "why." No regularity in a determinate causal nexus is incompatible with purpose. Explanation—to adopt a familiar contrast—may be mechanical-causal and interpretation teleological. The determinist world of physics may be not only "in order" but "in order to"—an end. The teleological view of Nature is at war not with any conception of order, however rigid, but rather with the conception of the universe as a mere chaos.

This plea that mechanism and teleology are not in any way at variance has often been made. But it leaves our scientific mechanist cold, and it is easy to see why. It is a cogent plea on condition that both categories are applied not to the totality of all that is, but to a part only; on condition, that is, that "nature" is *not* the total reality. This granted, we can posit a Purposer making use for ends of his own of a "natural order" which may be as rigid and mechanistic as we please. But once this transcendent Real, the wielder or bearer of the purpose, is denied or left out of account, the opposition

between determinist causation and teleology does become a real and irresolvable one. Thus Descartes and Newton have no difficulty in affecting the reconciliation; whereas to Kant the problem is more complex because he cannot allow himself to bring super-nature—his ethically based theism—fairly and squarely into his interpretation of "Nature." And the modern materialist for whom there is no reality at all beyond "Nature" finds himself unshaken in the belief that no reconciliation between the two points of view is possible.

If there is a "Super-nature," then "Nature"—the world of the scientist—may be at once mechanically and teleologically determined. If there is none, it cannot be both. Can this conclusion be avoided by reinterpreting the conception of "purpose" so as to make it wholly "immanent"? If so, we might identify "Nature" with "all that is" and yet hold that natural processes, and even Nature as whole, have a purposive aspect. But what will this mean? It must mean that we recognize in the present not only the "promise" or prospect of a more valuable future, but a "nisus" towards and for it. We are almost bound to use metaphorical language, to speak with Leibniz or Professor Alexander of the present "big with" or pregnant with the future or with some yet unrealized supreme "quality," or to speak with Shakespeare of "the prophetic soul of the wide world dreaming on things to come." Thus the conception of "immanent teleology" applied to the Cosmos as a whole either is a mere comforting "*als ob*" which cannot be taken too much in earnest, or it takes us right out of the world-view of mechanistic determinism.

It is in fact the growing recognition of the inadequacy of mechanistic determinism as a scheme of explanation which makes it necessary for the disbeliever in "cosmic purpose" to dig deeper and base his objection upon more fundamental grounds.

III

The more thoroughgoing criticism of the notion of a cosmic purpose, a universal teleology, may begin by considering what is really maintained by those who affirm it. Both the typical views on this side (those of "Smith" and "Brown") contrast, though in different degrees, "cosmic" and human purpose, which would seem to indicate that they do not strictly attribute purpose to the "totality of all that is." And this follows also from the fact that both views—though again with different degrees of explicitness—regard "Nature" as not the source of the cosmic purpose or its bearer, so much as the sphere of its manifestation. The phrase expresses, in effect, the universally pervasive and controlling operation of a supreme power and will "at the back of" reality, which for the more theistic of the two points of view becomes the "creator"

of nature the "creation." But leaving this latter conception out of account, the phrase "cosmic purpose" will be a phrase like "the policy of Russia." The Russian state as a whole corresponds to the absolute total Reality. Within it is a directing power, making and carrying out the "policy" *in* and *through* the citizens of the state and their institutions. The illustration used by Aristotle (*Metaphysics*, xii, 1075*a*) might be adapted to the present discussion.

Is the "good" in the world, he asks in effect, like the leader in an army, a distinguishable reality within it, or is it more comparable with the spirit of loyal co-operation that animates the army through all its ranks? (Aristotle says "the order of the parts," but the above is a permissible extension of his meaning.) Aristotle suggests that it is both: we may recognize a "good" as the unifying principle pervading the world, yet as specially embodied in the power directing and controlling it. Just so, theist and semi-theist may find the will of the "power behind" manifested *through* and *for* the whole natural order, and so employ the rather vague term "cosmic purpose."

Taken in this way the phrase points towards theism, and definitely away from pantheism or any form of monism. The army co-operates to carry out the general's strategy, and in identifying itself loyally with it may be said to make that strategy its own. But it does not literally make or devise the strategy. As Aristotle puts it, "the leader does not depend on the 'order' of the army, but *vice versa*." In the same way Smith will speak of man being a "fellow-worker with God," and Brown will speak of "accepting the inscrutable decrees of heaven"; yet neither will claim that man can modify in any way or contribute anything to the supreme purpose or plan which it is his business to acknowledge and realize. And probably both would agree that to accept a view like that of the late Dr. McTaggart, for whom the universe was in the last resort a society of immortal individuals undirected by any single supreme overruling will, would be to deprive the term *cosmic* purpose of all real meaning.

But here we are confronted by the real difficulty in the conception, rendered familiar by the criticism in particular of Rationalists and Idealists of different schools.

The realization of a purpose implies usually two things which seem to make it impossible to attribute purpose either literally to the totality of all that is or in the more theistic interpretation just considered to the "Father and Fashioner of all that is." These two things are, first, an environment, spiritual or material, to serve at once as the arena, the means, and the inspiration of achievement; and, second, an imperfection in the purposer, the contrast between the incomplete actual present and the envisaged ideal. And the difficulty of finding a meaning for these when we pass from human

to divine purposings is well illustrated in one of the most famous of all attempts at a cosmic teleology, that of Plato's *Timæus*. There the ὑποδοχή or matrix supplies the arena and the material, the εἴδη or Forms contemplated by "God" the inspiration or pattern for the carrying out of the Creator's divine purpose, while his need to impart his perfection is Plato's way of admitting that even the divine nature has not really completeness and self-sufficiency. The attempt was a heroic one, but the advowedly semi-mythic character of the account suggests that Plato is trying to fuse together in the fervour of his creative vision elements that are really incompatible.

To be engaged in working out a purpose is to be so far limited and defective; "finite" in the modern sense, "infinite" (*i.e.* incomplete, without wholeness) in the Greek sense of the term. Can the whole of reality be thought of so? Or even that which is the supreme reality?

More modern philosophic critics of cosmic teleology reinforce this objection by attempting to show that the temporal process is "unreal" in the sense of not being ultimate, that the "last word" about the world is not that it is "passage." This is, as already hinted, to cast doubt upon what unreflective common sense assumes without question to be real. But the doubt once cast is disquietingly clinging and oddly infectious. Even so whole-hearted a believer in time, change, process, and the dramatic and purposive character of reality as William James is found admitting "the solid meaning of life is always the same eternal thing. . . . In this solid and tridimensional sense, so to call it, those philosophers are right who contend that the world is a standing thing, with no real progress, no real history. The changing conditions of history touch only the surface of the show."[1]

This claim that the Cosmos must be whole and entire, and ultimately supra-temporal, and therefore that the conception of purpose cannot be applied to it as a whole, leaves us with the question: What, then, are we to do with this teleological category? For it seems to clamour for employment, it demands obstinately to *be* applied—even to the universe in its entirety. The critics of teleology have to tell us what attitude we must take up about it. And they are quite ready to do so. Two of the most famous solutions to the problem may be briefly considered.

IV

First, there is the endeavour of Spinoza, heroic in its austerity, to think away the whole teleological category as a human illusion.

[1] *Talks to Teachers*, pp. 299 ff.; quoted by Bosanquet, *The Meeting of Extremes in Contemporary Philosophy*, p. 191.

In the famous Appendix to Part I of the *Ethics* he seeks to show that it is possible simply to lay aside our attribute of "final causes" to Nature or God, and therewith to discard all the human "standards" and "values" which are the badge of our servitude. If we think clearly, we are to recognize that there is no place for all these in a world of absolute systematic determination. They are a pathetic fallacy, and teleology dissolves when we see things clearly and distinctly as they are.

But this heroic renunciation cannot really be made. It is not merely that even an illusion remains an obstinate fact, though this familiar platitude is strangely often disregarded. Nothing is unmade by a name. The most "illusory" experience remains obstinately knocking at the door of our minds, a guest who, however unwelcome, cannot finally be excluded. Spinoza, it is true, was very conscious of the pertinacity of the illusory "values" of "imagination." But Spinoza, as has been noted,[1] virtually gives back what he has bid us abandon by reinstating values and a goal for human effort under the name of "perfection"; and with this returns willy-nilly the idea of final causes and teleology. *"Fines" expellas furca, tamen usque recurrent.* It is not indeed *possible* consistently to think away our valuations. It may appear to be so because it is easy to confuse two very different things—the substitution of new values for old and the abandonment of the category of value altogether. We may, for instance, with Nietzsche, welcome a "transvaluation of moral values," but to *rethink* our verdicts is not to *unthink* the judgment of value itself.

The other answer to the question what is to be done with teleology is that of Hegelian, or perhaps rather Neo-Hegelian, Absolutism. Instead of contemptuous dismissal, the claim of purpose receives a qualified and rather grudging welcome. It has a right to admittance, but it must not be allowed to presume or to suppose that it can be anything more than a subordinate member of the household. In other words, the teleological point of view has its place *in* reality, but must not be applied *to* reality as a whole. Teleology refers to finite conscious experients. Reality is a Totality, *i.e.* a complete Individuality, and the sort of unity displayed in the realization of a plan, in choosing means for ends, doing this for the sake of that, can never be more than a "sub-form"[2] of individuality (*i.e.* it is only a quasi-individual form of unity?). Its application to the Universe "is got at primarily by freeing the idea of end from some incidents of finite purpose which cannot apply to the true whole."[3] Purpose is bound up with Time, and

[1] *E.g.*, by Professor Laird in his *Study in Value.*
[2] B. Bosanquet, *The Principle of Individuality and Value.*
[3] Bosanquet.

Time with indefinite and therefore ever incomplete process, and purpose, therefore, must share the subordination that on this type of theory befalls Time. Temporality is real, but Reality is not temporal. The time-scheme, one might perhaps say, is true "for all intents and purposes"; the purpose-scheme is true for all time. But this is not to deny that both are inadequate characterizations of the Absolute Real.

The Absolutist position, particularly as developed so eloquently by its modern English exponents, offers indeed a formidable criticism of the attempt to apply the conception of purpose in its stricter sense to reality as a whole. But an uneasy doubt remains, whether it has done quite full justice to the teleological point of view. It is to repeat a familiar criticism to suggest that Absolutism tends to present us with a "Totality" which, in absorbing finite "individuality" and taking over its name, has come to sacrifice something of its meaning. It is possible perhaps to detect in the belief in a "cosmic purpose" a fumbling protest on behalf of the unique import of the particular and against a too smooth and even incorporation of all the subordinate reals into a single all-comprehensive Reality.

V

We suggest, then, that the attribution of purpose even to the whole of reality does figure in groping fashion a true meaning which it fails literally to express.

What this is may perhaps be made clearer by a reference to instances in which the notion of purpose is misapplied even within the sphere of ordinary human concerns. Examples may be found in the everyday business of life as well as in the field of moral and æsthetic judgments. As to the latter, it is sufficient to note that, leaving out of account all disputed questions of ethical theory, the point of view of purpose, in so far as it implies "means and end," cannot possibly always do justice to the facts of voluntary action. We often act "*on* purpose" where we could not say we act "*for* a purpose." It introduces a false abstraction and separation of elements, by which the act and its result are set in a misleading contrast. Again, in a work of art, it is becoming a commonplace that to ask the purpose of the picture or the tragedy is to reveal mere crass ignorance of what a work of art is. The "purpose" of *King Lear*, or of Shakespeare in writing *King Lear*, was—*King Lear*. If there was any ulterior purpose in Shakespeare's mind, then "the less Shakespeare he." The tragedy embodies its end: it is means and end together. But the chief point which a work of art, such as a drama, illustrates is this: If we take it in its temporal character, as a whole of successive parts, the acts and scenes, is there any sense in which

we can regard these parts as standing to one another in the relation of means to end—as embodying, that is to say, the gradual realization of a purpose? We cannot, clearly, in the obvious and ordinary sense of these words; or rather, if we can, that is in so far forth a damaging criticism of the play. (One might say, for instance, of an inferior piece of work: "Act 2 has no justification save to prepare for the crisis in the third act." But in a masterpiece each scene of the play adds something to the total impression; is certainly not *merely* a means to some "effect" later to be produced.) And *yet*—and this is the special relevancy of the illustration—we can none the less say that one act "leads up to" a later situation. That is not its sole "purpose," but that is one of its aspects. And we can and must recognize that though the import and significance of the play pervade the whole, and though every part may have a value for the whole, yet there are in it moments—or a single moment—of climax, crisis, culmination, in which the significance of the whole is in a unique degree concentrated and focussed. These are the moments, the great scenes, that give the play its "point"; and in this sense it would not be very unnatural, though it would be strictly inaccurate, to speak of them as being the purpose of the other scenes and parts.

We see the same thing well illustrated in a more trivial instance, in the difference between a good story well and ill told. A man with no gift for anecdote may remember every word which comprised the "point" of the story, but in his hands it is a dull and lifeless thing just because the details which "lead up to" the point are *merely* the "means," and not, as in the hands of the real raconteur, themselves charged with a flavour of the "interest" which makes the story engrossing as a whole. And yet, though over-impatience to "get to the point" may spoil both the telling and the hearing of the story, there is a sense in which the "point" may be called the purpose of it.

Another illustration might be taken from the experience of travel. A man cruising for pleasure may plan out his voyage with a certain *destination* in mind. In a sense the journey, as far as the destination, is a "means" for arriving there, a route among other possible routes. But the most satisfactory journeys are those in which every place has also a value in itself, and not merely as a stage on the passage to the next.[1] The destination need not be the purpose of the whole voyage, for this has value and meaning throughout. And yet the

[1] Many a sightseeing tourist finds travel disappointing because he has not disengaged himself from the means-and-end point of view, and so does not allow himself to find *fruition* in each new experience as it comes. His purpose is in fact not even, *e.g.*, "to get to Rome," but "to return home after having been to Rome."

destination may, by its character of culmination, by being the acme of the entire experience, assume plausibly enough the appearance of being the "end" to which the rest of the journey is a "means."

The above examples are drawn, as is to be expected, from types of experience in which the time-factor enters very intimately. But the same point is illustrated (though less obviously) by others in which temporal process plays a much less essential part. In some forms of æsthetic experience, for instance, though the appreciation of the work of art "takes time," as its creation "took time," yet time does not enter into its meaning. We may wander about a cathedral for hours gaining a richer and richer experience of it, and its architect and builders may have worked at it for decades making it a richer and richer object to experience; but, once completed, it is "all there together," and there is no reason but the defect of our faculties why we should not intuit it in a single perceptual instant. Yet in this case, as in the others, we might, incorrectly but not unnaturally, select a certain part of the building as its virtual "purpose," because, though every part of it had its own contribution to make to the *whole* effect, *this* part had a special and crowning importance to which the others were also subordinate.

In short, within the sphere of ordinary human experience the application of purposive terms may sometimes be in strictness mistaken and yet not without some justification. In so far as "means" and "ends" fall apart, and "means" become, as it were, an alien price to be paid away to secure the "end," teleology gives but an imperfect and frustrated unity, and some experiences have an aspect of wholeness to which this point of view does less than justice. But even in such cases the conception of purpose may, none the less, have relative validity in pointing to the special function in such experiences of particular dominant "moments," focussing points for the meaning of the whole, to which the subordinate elements are ancillary, and from which in turn they derive a secondary import.

And so with the affirmation of a "Cosmic Purpose." Press the conception home, and we are caught in knots which a defiant Theism may cut but can hardly disentangle. Yet to dismiss it with contumely is too drastic a renunciation, and even to damn it, as Absolutism does, with faint and mitigated praise may be to slur or blur an element of true insight contained in it. And this would seem to be the implicit affirmation that Reality in its temporal aspect (whether this can be transcended or no) means culmination rather than destination. Thus the cosmic process will be thought of not so much as the passage to an indefinitely distant goal or outcome (which is what the term "purpose" strictly used would seem to imply) as a historical-dramatic process containing dominant "moments," focal points, which contribute to the significance of the whole—in

so far as we insist upon the wholeness of the Real—yet draw to themselves the meaning of subordinate features: crucial contexts in the march of time, climaxes, or even a single climax, in "the eternal deed that is the heart of reality."[1]

[1] B. Bosanquet, *The Principle of Individuality and Value.*

IS MORAL PROGRESS A REALITY?[1]

PROFESSOR G. C. FIELD

Is there really such a thing as moral progress? Do we get any better as time goes on? It is a question which must often exercise the minds of those who reflect on moral questions at all. And it is a frequent topic of discussion, both in private conversations and in the written contributions of a good many of our popular philosophers. Of some of these contributions one may safely say that their chief value is as a warning against the dangers of hasty generalization on a subject such as this. And, taking advantage of such a warning, I shall make no attempt to give a final or dogmatic answer to this question. All I can try to do, within the limits of a single lecture, is to disentangle some of the most important considerations that seem to be in people's minds in discussing this question, and to estimate their importance as arguments on one side or the other.

I dare say that some of my audience will expect me to begin the discussion with a series of careful definitions, in which I should state at length exactly what I mean by "moral," by "progress," and perhaps by "reality." I am not sure that there might not be something to be said about the meaning of "is" and "a." On some subjects, and in the hand of some writers, this might be no doubt a fruitful method of approach. But I will ask to be allowed here to adopt another method, which in my own thinking I have often found more fruitful, and begin by supposing that we know what we mean by these terms, at least enough to start the discussion. And perhaps at the end of such a discussion we may find that our meaning has become somewhat clearer to ourselves than it was before. And we may be prepared then to make an attempt at the definition which we evaded at the beginning.

Are there any undoubted facts that we can start from which will be relevant to this discussion? One fact, that seems to me not to admit of doubt, is that people do make moral judgments. That fact is the starting-point of all ethical discussions. And it remains a fact if the final conclusion of our discussion is that we have no grounds for making such judgments. And a further fact is that at any particular time in any particular society there is a large number of such judgments which are generally accepted without very much question, and which most of us do no more than apply to particular actions

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and particular persons as we become acquainted with them. These are what we call the accepted moral standards of the time, or the ordinary ideas of morality current among us. Further—and here we come on something more immediately relevant to our particular problem—these accepted standards or current ideas do change from one time to another, and, at the same time, differ from one group of people to another. It is true that these differences have often been very greatly exaggerated. But that there are some differences can hardly be doubted. And I suggest that one meaning of our question is, Are these changes in the accepted standards, which influence so much of our conduct, always or sometimes changes for the better?

Here, at the outset, I can imagine that a difference of opinion might develop from some quarters. It might be urged that it did not matter so greatly what our moral standards or ideals were. The important thing is that we should live up to them. And progress must therefore be looked for in an increased fulfilment of these ideals rather than in any change in the ideals themselves. But there are grave objections to this view. It might be suggested that one result of it would be that moral progress could be attained just as well by lowering the ideals as by making a greater effort to live up to them. We could get our standards observed by simply leaving out anything that people found very difficult. And that would certainly be a queer meaning of progress. Yet I do not think that this argument is the real objection against the view. For, though such a result might be theoretically possible, it seems that in practice the much more likely result would be that, as the moral standards were lowered, the efforts to live up to them by those who found it difficult would be correspondingly weakened.

It seems to me to lie in the very meaning of moral standard or moral ideal that it implies a principle of conduct which in some way is different from other principles of conduct or other possible motives for action at work among us, and which, on occasions, may conflict with them. If the conflict is a real conflict, there will always be the possibility that for some people in some circumstances these other motives may prove stronger than the moral motive. There will always, therefore, be a certain gap between accepted moral standards and actual conduct. On the other hand, if the gap becomes too wide, if it becomes so wide that the supposed moral ideal has little or no influence on conduct, then I should say that it does not deserve to be called an accepted moral standard at all, even though unthinking people say that it is.

To illustrate what I mean, I should say that at the present time among ourselves it really is an accepted principle of conduct that lying and stealing are wrong, though there are plenty of liars and thieves. But, at the lowest, we condemn these things in other people,

we resent it if we are accused of them ourselves, and we feel ashamed if we are found out in them. Here the accepted moral standard really influences conduct, and undoubtedly prevents many lies or thefts from taking place, to which we should otherwise be tempted. On the other hand, a large number of people at the present time state, in words, that they believe in the Christian principle of morality, which, among other things, teaches that material wealth is etiher a positively bad thing or a thing of no value in itself at all, and that the pursuit of wealth is not a worthy object. But, in fact, these ideas exercise no influence at all on the vast majority of us. No one is ashamed of wanting to be rich or of doing everything in his power to become so, as long as he does not infringe certain other moral principles, like those mentioned above, which really are accepted. Nor does it ever occur to us to condemn other people for wanting to be rich. It is clear that the notion that riches are bad or worthless is not really in any sense among the accepted moral ideas of the present time, even though we sometimes say that it is.

I conclude, then, that the gap between moral principles and moral practice must always exist. And though, no doubt, it varies in extent from one age or one country to the other, the variations only occur between relatively narrow limits. Not much, therefore, in the way of moral progress can be looked for in this direction. And we return to our accepted moral standards. These, as we have seen, undoubtedly change. How are we to tell whether and when the changes are changes for the better?

I do not suppose that anyone would maintain that there is continuous progress, and that all changes are necessarily for the better. Yet some of the arguments against the reality of moral progress to be met with in popular writings seem to assume that that is the position which has to be refuted. It is very easy to pick out certain periods in certain places and show that the current moral ideas there were in some respects more like our own than the current moral ideas of some intervening period. No doubt King Hammurabi's legal code was, tried by our standards, on many points more enlightened than the English law a century or more ago. But this appeal to isolated instances is very superficial. It would apply equally to our scientific knowledge and our control of the material world. Scientific knowledge has been acquired and lost again in some dark age. And useful arts have been learnt and disappeared. Yet no one would doubt that there has been progress in scientific discovery and invention. We have to deal with more serious difficulties than that. I can only suggest a few of them here.

1. I think that the suggestion that moral progress must be sought for in the realm of accepted standards and current ideas would be distasteful to some people because it might seem to throw doubt

on the reality of anything that could properly be called morality at all. Others, no doubt, would welcome it for the same reason. For it might seem to lend support to the view that the whole idea of morality was merely a set of conventions, accepted just because they were customary, changing just as fashions in dress or social behaviour change, and with no more authority than these. We must dispose of this at the outset, if we are to go on talking about moral progress at all.

If I were asked to prove that morality was not merely custom and convention, I confess that I should decline the challenge. I cannot, that is to say, offer any proof which must inevitably and absolutely convince anyone with the certainty and self-evidence of, say, the simple propositions of arithmetic. Even with these, as a matter of fact, if anyone chooses to say that he doesn't see them and doesn't believe them, we are helpless. "The single resolute doubter," to whom appeal has sometimes been made, can never really be refuted in this or any other branch of thought. At any rate, in our thinking about moral questions, all that we can do is to examine carefully such evidence as we can find and decide, each of us for himself, in which direction we think it points. And in this respect our thinking about morality is no worse off than our thinking about any other question to do with human beings. Certainly our opponents will be in just the same plight as ourselves. It sometimes seems to be supposed that, because we cannot prove with mathematical certainty that morality is not merely custom, it is thereby proved that it is. At any rate, that is about all the argument that we generally get for this point of view. But the single resolute doubter would be just as awkward a customer for those who do not believe in morality as for those who do.

With this proviso, I will summarize briefly the considerations which seem to me to give an overwhelming degree of probability to the view that morality is not merely custom or convention. In the first place, I am influenced by my own experience, which seems, as far as I can judge, to be shared by a large number of other people. I seem to myself, when I judge anything to be right or wrong, to be judging something about it entirely different from judging that it is the custom or not the custom. I may not be clear about all that is implied by calling something right or wrong. I may recognize that what particular things I believe to be right or wrong is sometimes influenced by custom. But that is an entirely different thing from recognizing that the rightness or wrongness, the quality that I ascribed to these things, merely meant customary or not customary. When I say that I have been accustomed to regard such-and-such an action as right, I do not mean that I have been accustomed to regard it as customary. So my own experience seems to tell me that

right and customary are different things. And I want much better reasons than any I have ever seen given for doubting the testimony of my experience. At any rate, the burden of proof seems to me to lie with those who would have me doubt it. And I cannot find that they are very well prepared to shoulder this burden.

Further, if morality is merely custom, it seems impossible to see how anyone could ever come to criticize or challenge a custom on moral grounds. Yet that this is not infrequently done, and sometimes done successfully, seems beyond dispute. Finally, though I attach less importance to this argument than the others, we may ask how the custom of thinking of some things as right and some as wrong ever arose in the first place. It is like the old tag from the eighteenth-century controversy. "Religion was merely the invention of the priests." "Then who invented priests?" This seems to be less decisive than the other arguments, because there are undoubted cases of fashions and customs arising from nowhere or from purely trivial and accidental causes. But such cases, on inspection, seem to differ in character, to be far less tenacious, and less widely spread than the custom of judging things to be right and wrong, or good and bad. So that this argument does seem to be to add to the probability created by the others, though it would be less decisive by itself.

2. There is another, but closely allied, set of difficulties in connection with this matter of the conventions of morality. There are many who, while not denying the existence of morality, would feel that, so far as it was a matter of convention, it was not really morality at all. If, therefore, the only kind of progress to be looked for is in the accepted moral standards, this is not really moral progress. That must be looked for, if anywhere, deep in our inmost nature, apart from all influence of custom or environment. And when they look for it here, they seem to despair of finding it. "The accepted ideas of morality may change from time to time," they tell us. "But we don't change. We don't get any more moral by nature. Take anyone of us and put us in a different environment and among a different set of ideas, and we shall behave according to those ideas. Human nature doesn't change. It is only the framework of custom and convention which changes." I saw not long ago a letter in a daily paper on the subject of cruelty to animals and the alleged superiority of our own country over certain other countries in this respect. And the writer concluded his argument: "So we see that our supposed humanity is merely"—note the "merely"—"a matter of training and environment, and not due to any innate moral superiority." I remember, too, a cynical Italian friend of mine speaking scornfully of the objections that some English people feel to bull-fighting, and characterizing it as "a mere veneer," on the ground that, according

to him, English people who lived in Spain often became as enthusiastic spectators of bull-fights as the Spaniards.

It is interesting to see how the ancient distinction between the natural and the conventional reappears so continuously. It began in the fifth century before Christ, and the fallacies that it rests on were exposed by Plato and Aristotle. But it was never completely laid to rest. It reappears, for instance, in the seventeenth century with Hobbes, and again, in a different form, in the myth of the "noble savage" of the eighteenth century. We see the kind of form that it adopts to-day. To the quotations just given we may add the remarks so frequently heard during or just after the war. In war, we were often told, all our acquired conventions of behaviour fell away, and we got the real man, human nature as it really is, stripped of the trappings of civilization in its naked savagery. It was not completely true, of course, even in war. But the important question to ask is, why the qualities that came out in war should be regarded as "real" or "natural," any more than the qualities that developed in peace.

The idea that still seems at the back of the minds of people who talk like this is that all the restraints which customs and conventions involve are something imposed on us from outside, not expressions of our own "real" nature. In our heart of hearts, our "real" natural selves, we really want to be free of them and follow our impulses unchecked. Yet such an idea is extraordinarily opposed to all the available evidence. If we look at the history of the human race, as far as we can know it, we should rather conclude that the vast majority of mankind yearns for such restraints. We hug our chains. One of our strongest natural impulses is to build up a system of customs and conventions and accepted ideas to control our conduct. So the most natural man is the most completely conventional man. It requires a tremendous and continual effort to free ourselves from the control of conventions. And such an effort is rarely successful except within very narrow limits.

If we ever do succeed in getting rid of a set of conventions on a large scale, it is only to replace them by others. To anyone who knows what the war was really like, it must seem particularly laughable to represent it as an outburst of unrestrained natural impulses freed at last from artificial controls. There can have been few conditions in which so many impulses had to be so frequently restrained and so many other impulses artificially imposed. To take but one instance, we know that it was the constant occupation of those in charge of training troops to keep up the aggressive spirit of the Army. And there was a vast apparatus of training and propaganda devoted to the end of whipping up our hatred of the enemy beyond what we should have felt if left to ourselves. It is the same thing in other connections. No doubt the Spanish youth has to learn to repress

any feelings of pity for the sufferings of animals in the bull-ring that might arise in his mind. The force of public opinion and the unpopularity he would incur by expressing them would certainly be normally sufficient to drive them out of his mind. Similarly, the vendetta or family feud in countries in which it is practised is kept alive quite as much by the force of public opinion as by the "natural" impulses of those who practise it. I have been told that in one of the last trials for a vendetta murder in Corsica, in which a perfectly inoffensive man was killed in repayment of some wrong supposed to have been done by his father, the murderer pleaded that he had been driven to it by the jeers of his fellow-villagers at his first impulse to leave things alone. Again, it is obvious and familiar how much sexual laxity is due, in part at any rate, to the pressure of public opinion in circles in which it is considered the right thing. Even in the milder form of obscene conversation we know how often we simulate an enjoyment of it that we do not feel for fear of being thought prudish and easily shocked, or for fear of being told that our knowledge of modern psychology is not up to date, and that we are suffering from Victorian repressions. We are afraid even to mention the obvious truth that an exclusive attention to any one subject can become extremely boring. Altogether, it is clear that there is quite as much conventional immorality as conventional morality. And the "natural" man is still far to seek.

We shall not find him until we realize that he is not a different person from the conventional man. Convention is natural, as we have seen. Further, not only is convention in general natural, but each particular convention of any importance is natural, or has something natural about it. It seems to me extraordinarily improbable that any convention, any idea about what was or was not to be done in human conduct, could ever become widely spread or be held for more than a very short time unless it was based on some impulse or felt need innate in human beings. Without that, it could never get accepted for long or by many people at all.

The situation as I picture it is something like this. We all have a number of different tendencies innate in us. That is the raw material out of which the actual "we's" are made. But, considered by themselves, these natural tendencies are an abstraction, hardly more than bare potentialities, the embryo of human nature. The actual way in which they work is the result of many influences that come to bear on us. These influences give a greater or lesser degree of organization to these tendencies. They strengthen some at the expense of others. Sometimes they may bring into actual working potentialities that we should never have realized to exist in ourselves otherwise. Conversely, they may so shut off the openings for development of other potentialities that we fail to realize that we have them. Our

actual, real selves are not these abstract potentialities, but the potentialities as developed by these various influences. And among these influences probably the greatest and most important are our conventions, the ideas of what is or is not to be done which we find current about us.

That, perhaps, will help us to answer the well-worn question, Can human nature be changed? The original tendencies, probably, do not change to any great extent. At any rate, there is no evidence that they do. But the ways in which they are developed and organized can and do change enormously. These changes, it is true, only arise from the development of the tendencies already there. There is, therefore, a certain limit to the possibilities of change. Human nature is not infinitely plastic. But we do not know how plastic it is. We are beginning, I think, to find out something about some of the tendencies which will always be there and must always be taken into account. And I can conceive no more fascinating and no more valuable study. But we have still advanced a very little way in this, much less far than many people think. We know very little about what can be made of these tendencies, the different forms in which they might be trained to express themselves. And we cannot speak with any certainty about what further potentialities there may or may not be in us which might be brought out by favourable influences.

We see, then, if this argument is correct, that there is no reason to despise convention. What we are made by convention is just as much our real nature as anything else about us. And we may be quite satisfied of the reality of moral progress if we can find that there is any progress in our conventions or our accepted ideas of right and wrong.

3. We must now face a third difficulty. How are we going to judge between one set of conventions and another? As I have described it, it looks as if all conventions came about in very much the same way. Further, our own ideas will be largely the result of the conventions among which we live. How are we going to get outside these influences, and judge whether one set of accepted ideas of right and wrong is nearer the truth than others? We must attempt something of the kind if we are to decide whether the changes in moral ideas are to be called progress or not.

We may ignore the conventions of thought and action which make no claim to any moral basis, those, for instance, which base their claim on being up to date and in the latest fashion. On the other hand, we must not commit the *naïveté* of supposing that all those who do not use, or even repudiate the use of, the accepted moral terms like right and wrong are therefore not to be regarded as actuated by moral considerations. Mr. Bertrand Russell, for instance,

who, to judge by his writings, sometimes likes to think of himself as the type of the cold, hard, scientific intellect, emancipated from all the prejudices of morality, in reality makes much more the impression of having the soul of a prophet, with all the reforming zeal and the readiness to condemn characteristic of that type. And many lesser men are shy of speaking of right or wrong, or good or bad, and prefer to use some colloquial substitute, fashionable at the moment. But the attitude that these express is exactly the same. When we say, "That's a rotten thing to do," or whatever the fashionable phrase of the moment is, we mean no more nor less than that it is a bad or wrong action. At any rate, it is clear that there are quite enough conventions of morality to occupy our attention. On what ground, if any, are we going to pronounce one to be morally superior to the other?

Here, perhaps, the amateur of definitions will think that I cannot escape his demand to supply him with a clear definition of what I mean by moral. Yet I think I can evade him once more. And to explain why I must give, briefly and dogmatically, my general view of the nature of our thinking about morality.

As I see it, human beings in all ages have had, or thought they had, glimpses of certain properties which human actions and characters, and perhaps other things as well, seemed to possess. They indicated these by terms like right and wrong, good and bad, or the equivalents in other languages. They have never been more than glimpses, and sometimes different people's glimpses seem to have given them rather different impressions of the facts concerned. But the impressions always had something in common. They would all agree that the positive moral property was, in some way, a reason for pursuing those things in which it was present, and the negative moral property a reason for avoidance. And they would agree that a reason of this order stood somehow on a different footing from other possible reasons, a difference which we can best express by saying that it claimed a special degree of authority. I think, too, though the impressions here seem more confused, that they would all agree in ascribing some sort of universality to the moral fact. Its claim would not be regarded as a private claim on one individual alone. We say, "What's right for one person is right for another." But that is expressing it more definitely than the first glimpses of this feature would allow. Then it is clear that the moral reason for doing something is not identical with simply and directly desiring to do it, whatever the relations between the two may turn out to be. On the other hand, it does seem part of all the impressions of the moral facts that a certain attitude, which at any rate contains emotional elements, is closely connected with our belief in their presence in any particular case That is what we call in our language the attitude of

approval or disapproval. These feelings are hard to analyse, and perhaps they contain some different elements in different cases. But there seems to be always a core which is recognizably identical in all cases.

These seem to me the chief marks of identification in which all impressions of the moral facts are agreed. But, of course, it does not amount to a complete description or definition. To work out, as far as possible, such a description or definition is the task of moral philosophy. And a long and difficult task it is, which can never be completed with absolute certainty. Some have found it so difficult that they have preferred to say that there are no facts there, that there is nothing in reality which possesses these marks of identification, and that the supposed glimpses were a mere illusion. But that seems to me extraordinarily improbable, and I have never seen any argument of serious weight in support of it. So I will ask to be allowed to assume for the purpose of the present discussion that there is really something there, and that there are such facts as right and wrong, or good and bad. But to define them, to say what they are, beyond these few hints would involve developing a whole system of moral philosophy, which would demand at least twenty lectures of this length before even the outlines were sketched.

Fortunately for the human race, however, it is not necessary to work out a complete system of moral philosophy before we can make moral judgments about particular things. Our marks of identification are sufficient to enable us to arrive at some view about what things are good and what bad before we know the full nature of the facts which the words "good" and "bad" indicate. Of course, in most of our conduct we act on views about what is right and wrong which have already been arrived at and embodied in the conventions of our time. And that is quite natural and proper. But in the present discussion we have to put ourselves at the point of view which tries, for a moment, to stand outside these and judge them in the light of conclusions arrived at by our own thinking. And in this investigation we work with very much the same methods of thought and use the same evidence as in the more purely philosophical task of trying to decide what the general nature of the properties, rightness and wrongness, is. What is the evidence that we can use as the basis of our conclusions?

Well, of course, the moral conventions, our own and other people's, form an important part of our evidence. It might be thought that we could do little with them without a standard, derived from some other source, by which to judge them. But at least we could see whether any one set of conventions was consistent with itself. If we find that it condemns one set of actions and approves another, which on the closest investigation appears to be of precisely the

same general type as the first, we shall be justified in suspecting that there is something wrong. A good instance of this can be found in the attitude adopted towards national movements. When a national group within a state claims its freedom and rises up in support of it, public opinion in other countries often approves of the rising as of a nation rightly struggling to be free, and condemns the repression of it as tyrannical and oppressive. But when one of these countries finds itself in its turn faced by a national uprising, its public opinion will often condemn this as treachery and disloyalty, and approve the justifiable severity of its own methods of repression. Of course, there are sometimes real differences between the different cases. But as the phenomenon is so general, and as almost every country has at some time condemned a rising against itself or its allies, and approved risings against other countries, particularly those with which its relations are not friendly, we are justified in supposing that there is some self-contradiction here.

Following on from this, we might find, on examining a large number of different conventions at different times and different places, that there seemed to be certain underlying ideas at the back of most or all of them. But some might show a much clearer realization of them and take them much more seriously than others. We should probably be justified in saying that these showed a higher stage of development, unless we found that the greater attention to one feature of this kind was simply attained by a correspondingly greater neglect of some other equally essential feature.

Finally, something might be learned by observing the effects of a contact between two different civilizations with different standards and conventions. Sometimes, when this occurs, the one group seems to recognize almost immediately that the other group represents a higher type than its own. Of course, this evidence must be used with great caution. It would be very rash to suppose that the conventions which survive are necessarily, in all circumstances, the best. But if a convention or set of conventions goes down at once, as soon as it comes into contact with other ideas, there is probably something wrong with it. Westermarck tells us how often the approval of cannibalism disappears almost immediately when the tribes which practise it come into contact with another civilization, before there is any question of a forcible suppression of it.

But we cannot remain content with classifying and analysing various moral conventions, as if they were natural objects emotionally indifferent to us. Our own moral attitude has to come into consideration. Many people, perhaps, would claim that they judged of right and wrong by their own inner light. They would say that they feel that this or that was right or wrong, or that they know it instinctively or intuitively, or any other of the ambiguous phrases that are

intended to convey the certainty of direct acquaintance. I believe that these phrases express an important fact. It seems to me as certain as anything in this matter can be that there is such a thing as first-hand moral experience. This is the origin and foundation of all moral conventions and all theories of ethics. But I am much less certain of the forms it takes and the way in which it works. It is an experience which badly needs further analysis. And, in default of this, anything that I have to say about it can only be put forward tentatively and provisionally.

I think that we should do well to be very cautious about appealing too readily to our own first-hand moral experience. I do not believe that such experience is a very common thing. I should imagine that it has come to most of us at one time or another. But it comes comparatively rarely. Perhaps that is what distinguishes the great moral reformers from the rest of us, that they are constantly and continuously able to see a light that only comes in occasional flashes to the great majority. Again, it is possible to confuse it with other experiences. Thus, the shock of being faced with an unaccustomed or unpopular idea may often masquerade as real moral disapproval. It is true that the two can probably be distinguished without difficulty by a little resolute introspective examination. But many people do not like the effort of examining themselves thus. Finally, it is often very easy to be mistaken about the situation which arouses this experience. The action which we approve or condemn may be in reality very different from what we think it, though if it had been as we thought it our approval or condemnation would have been justified. Perhaps that is why it is in general much safer to confine our judgments to our own actions where we have at least much greater knowledge of the nature of the action than we can have of other people's.

There is another point, important if it is true. It seems to me that this first-hand moral experience only comes to us in connection with a particular situation. Its typical form is the conviction that this particular action here and now in these circumstances is or would be right or wrong. We try, rightly, to generalize it afterwards, to draw some rule from it that will apply to other cases. But in this we are going beyond the immediate experience and drawing inferences from it. And the certainty diminishes accordingly.

But, with all qualifications, first-hand moral experience is a factor of great importance. It is the basis on which we build a good deal of our own moral principles. And it is at the bottom of the moral conventions of any age or group. We might perhaps describe moral conventions as an erection of interpretation and inference on the foundations of moral experience, held together in relative permanence by the cement of custom and habit, though the metaphor ought to be

modified to allow for the fact that the solidifying power of custom generally modifies the shape in some degree. But our moral experience also provides some help in the criticism and evaluation of moral conventions. We can compare our interpretations and generalizations of our particular experiences with those expressed in the customary standards of the age we are considering. Conversely, when the general rules laid down by some set of conventions are applied to a particular case, we may have a direct moral experience which drives us to differ from the conventions. I suppose that is how movements of revolt and reform begin. People have been taking certain rules of right and wrong for granted. And then one day someone is faced with a concrete situation in which the thought of applying these ideas or the actual spectacle of these ideas being applied awakens him with a shock, and he says to himself: "No, this won't do. This cannot be right." We must remember also that it is possible for such revolts to be carried too far, and for a whole set of ideas to be condemned unjustifiably because they happen to have been associated with one which is in conflict with the reformer's first-hand experience.

I must not delay too long over this aspect of the problem. So I will only just mention the help that we can get from other people's evidence, particularly the great thinkers and moralists. Some of them are helpful because of their own strong moral sense, some because of their special sensitiveness to the moral atmosphere around them which makes them good interpreters of the current ideas of their time, and some because of their reasoning powers which enable them to see, more clearly than most of us, just what general conclusions can be drawn from the evidence. A few, like Plato, seem to combine all these qualifications. In general, I would say that any moral idea which is or has been widely held, and any idea which is seriously maintained by a serious moral thinker, has to be taken into account as evidence. If we cannot accept it, we must at least be able to explain how it has come to be held. I must pass over too several auxiliary studies which may at times help us in our search.

And so we come back to our original question, Is moral progress a reality? Can we, on the basis of this evidence, say with any confidence, that accepted moral standards improve? I shall hardly be expected at this stage to construct a complete set of standards by which to measure all the differences between the morality of one age and the morality of another, nor to examine the whole history of the world in the light of them. But I will suggest one or two points which seem to me to emerge pretty clearly from the consideration which we have mentioned.

Thus, there is one general principle which seems to be implied in a great many of the most widely accepted moral judgments, and which

has been stated explicitly, in one form or another, by many of those who have thought most deeply on moral questions. That is, the principle formulated by Kant in his second maxim, that we ought always to treat human beings as ends, never merely as means. It is the same idea which was expressed, less successfully, by Bentham when he said that everyone was to count for one, and no one for more than one, in the distribution of happiness. And I suppose that the good Christian would express the same idea by saying that one man's soul is just as well worth saving as another's.

It seems to me clear beyond a doubt that in modern times this principle has attained a much clearer recognition and a greater influence on our accepted ideas of right conduct. Most of the great movements which mark the last hundred years or so—the abolition of slavery, the emancipation of women, the increased care for the interests of children, and, in general, any movement which takes the form of a protest against the idea of any group or class being regarded as existing simply for the sake of some other group or class—are expressions of this principle. And it shows itself in many other slighter and subtler ways. It is still far from being recognized universally in all relations of life. And in the application to particular cases we may have made mistakes in detail. But these can be corrected by experience as we go along. And the general tendency marks a clear moral advance.

"Ah!" our professional pessimist would say, "this may be all right. But why pick out this particular moment as a test of progress? What guarantee have you that there may not be a reaction against all this in a century or so, or indeed to-morrow, and we may relapse into barbarism again. That is what generally happens. Look at the fate of the Babylonian, Minoan, Egyptian, Greek, Roman, and Byzantine civilizations! Look at Mexico! Look at Peru!" and so on and so on. There is truth, of course, in the reminder. But to me the most significant fact is, not that human beings relapse into barbarism from time to time, but that they generally climb out of it again. It would be absurd to take the occasional reaction as being the real and important fact and neglect the long process of rebuilding order and civilization which seems to have occupied our race for at least as much of our time as the other. Certainly, if anyone held that we had simply to sit still and we should automatically improve, the pessimist's warning would be valuable. But it does nothing to weaken the belief, which I hold that the facts point to, that there is a natural tendency in us which makes for moral progress. It simply points out, what is undoubtedly true, that this cannot work under all possible conditions, but needs favourable circumstances, or perhaps rather the avoidance of certain particularly strong unfavourable circumstances.

But are there any grounds for thinking that the circumstances are any more likely to be favourable than unfavourable as time goes on? I think there are certain grounds for hope, though none for excessive confidence. Probably more people throughout the world than at any previous time are interested in finding out what the favourable circumstances are, though we are only at the beginning of the task yet. And, with increased knowledge, we are also finding out that to some degree these circumstances are within our control. The state of civilization, for instance, has in some ways been affected by material conditions, such as the food supply, or the prevalence of certain enfeebling diseases. And over them our control is increasing all the time. Then, again, many or most of the relapses into barbarism have been the result of the unexpected impact of other races of lower standards. That, certainly, becomes less likely, with the increase of knowledge of different races and the increase of contact between them.

But I would not exaggerate the grounds for optimism. Our knowledge and control is still imperfect, and probably will always remain so, though it may improve greatly on the present conditions. One factor in particular, which seems to me of the first importance, is one about which it is most difficult to prophesy. That is the emergence of individuals of exceptional power who will exercise an influence one way or the other. I have already spoken of the influence of great moral reformers. But the other possibility is equally present. A man of commanding personality and powers of leadership may emerge who will appeal with particular force to some baser motives in us. It is not difficult to glorify some of our lower passions till they begin to masquerade as moral principles in our minds. I can think of at least two political leaders in different countries in modern times who have had influence in this direction, and many more who have tried to attain it without success.

The same kind of influence, on a much smaller scale, is exercised for good or bad by countless individuals, who stand out just enough from those who immediately surround them to have such influence on them. And the way in which this will work is the most impossible to foresee of anything. They are themselves, of course, largely the product of the surrounding influences which are common to their whole society. But the little bit extra which they add of their own may be the result of such innumerable different causes that it is not a calculable factor. The difference that each one makes may be infinitesimal in amount. But the sum of all their contributions may be considerable. So that the results that these may produce cannot be foreseen.

If this is true, it would seem that there is nothing inevitable about moral progress, or about moral retrogression, if by inevitable we

mean something that cannot be affected by the action of individuals. But there does appear to be a natural tendency in the direction of progress. And the production of the conditions which favour the development of this tendency depends to a considerable and increasing degree on our own wills and our own efforts. With this we may well rest content.

McTAGGART'S CONTRIBUTION TO THE PHILOSOPHY OF RELIGION

ROBERT LEET PATTERSON, M.A., B.D.

THE title of this paper may, at first glance, somewhat surprise the casual reader. That the writings of a philosopher who was, by his own confession, an atheist should contain a trenchant critique of the theistic position is only to be expected; but the suggestion that any positive contribution to the philosophy of religion can be found in them may appear somewhat startling, and even paradoxical.

McTaggart's atheism, however, was of a very unusual type. Like every other constructive and systematic metaphysician, he sought to deal in an adequate and comprehensive manner, not only with the nature and structure of ultimate Reality, but also with the great problems of human destiny, with life and death and immortality, with the freedom of the will, and with the soul's attainment of the Beatific Vision. Scores of men less able than he have discoursed on these topics, and have elicited a widespread interest and approval. But they have usually been theists, whose teaching has been welcomed by that multitudinous band of theologians and ecclesiastics who are busy erecting props and stays beneath the shaky walls of traditional and conventional religion. Some few of them, on the other hand, have been naturalists, like Mr. Russell and Professor Santayana; and their strictures and condemnations have been grist to the mill which supplies so many of our contemporary social and intellectual radicals with their philosophy. But McTaggart was neither. He stood apart and alone. By conviction he was an atheist, and therefore an object of dislike and suspicion to the conventionally religious mind. But he was also an idealist, and *ipso facto* the mortal enemy of all naturalists.

In truth, the more closely we examine McTaggart's position, the more original and significant does it appear. For his teaching introduces into Western philosophy a way of thinking which, although long familiar to the Orient, has heretofore found no outstanding advocate in the Occident. Atheism, to the popular mind, has always been to all intents and purposes identical with Materialism. Idealism, on the other hand, has been the traditional friend of religion, and many of its exponents and defenders have been professed theists. It is, of course, also true that, from the Middle Ages to the present day, idealistic speculation has from time to time shown a pronounced tendency to develop in a non-theistic direction. One has but to cite

such names as David of Dinant, Spinoza, Bradley, and Bosanquet in support of this assertion. But the systems which these thinkers elaborated, although they denied the existence of a personal God and reduced the human soul to the rank of a transient manifestation or phenomenal appearance of Reality, nevertheless may be properly described as pantheistic rather than atheistic. For they provide us with a God, a Substance, or an Absolute, call it what you will, which serves as the source of all finite existents, and which is to be regarded as the object of veneration or worship.

In the Orient, however, the conception of the universe as an organism or ordered whole, embracing a multitude of finite spirits which are neither created by, nor manifestations of, any single and ultimate Spirit, is one which has been widely held for over a score of centuries. We have but to turn to the Sāṅkhya philosophy, or to the religious systems of the Jains and the Buddhists, to discover that such is the case. That a conception of this sort should at last have become domiciled within the realm of Occidental metaphysics, and should have been elaborated and defended with all the subtlety and logical acuteness of such an intellect as McTaggart's, is surely an event of the highest importance, and one which certainly should not be ignored by any whose interests draw them toward the philosophy of religion.

It would, of course, be absurd to suggest that McTaggart's system was in any sense a derivation from or an adaptation of the work of Oriental thinkers. His reasoning was emphatically his own, original, profound, and massive. It is quite possible that it would have attained its present finished form had none of these Eastern metaphysicians ever existed. Yet it is also permissible to point out that McTaggart may have found in their teaching much that was congenial and suggestive. A certain kinship of thought and feeling there undoubtedly is, just as equally clearly there are pronounced dissimilarities and disagreements. In as much as the purpose of this article is to examine the nature and extent of McTaggart's contribution to the philosophy of religion, we may conveniently scrutinize at once those aspects of his thought which agree with the Eastern philosophies in question in opposition to the conventional theistic religious thought of the West, and thereafter proceed to the consideration of those aspects of his system which are original and unique.

At the outset, however, we must face the objection that we are engaged upon a fruitless task. An atheistic religion, it may be urged, is an impossible paradox. But let us see. Religion, according to Martineau, is the "belief in an ever-living God."[1] If we accept this definition, what shall we say of the polytheistic faiths in which such a vast proportion of mankind have believed? Had the Greeks and the

[1] *A Study of Religion*, vol. i. p. 1.

Romans, the Celts and the Teutons no religion? So narrow a definition is obviously useless, not only for the philosopher, but for the historian and the anthropologist as well. Shall we than concede that religion can be either monotheistic or polytheistic, but deny that it can be atheistic? How then are we to characterize systems of thought which affirm the reality of spirit and its persistence through an indefinite series of births and deaths, which emphasize the ever-present influence of the moral law upon its destiny, which inculcate the practice of contemplation and stress the value of mystic insight, and which teach that the individual spirit is capable of finding its deliverance and its salvation by passing into Nirvana, the "Immortal," the "Unshakable Refuge?" If such doctrines are not religious, what are they?

It is evident that such theories as those outlined above are far more akin to the theistic interpretation of the universe than the naturalistic. If a dividing line be drawn, they are on religion's side. Of course, if our definition of religion be so framed as to include the belief in a God or gods, then Buddhism and Jainism are not religions.[1] Call them then philosophies if you choose. Classify these systems by what name you will, their significance and importance for the philosophy of religion remains unchanged. And that is all that is here contended for. Accordingly we shall assume for our present purpose that the religious status of these movements has been conceded, and that the philosophies upon which they are based are philosophies of religion.

In the light of the foregoing discussion, it is clear that the religious import of McTaggart's philosophy cannot be denied. For in his view the universe consists of a society of uncreated and eternal selves, which exist *sub specie temporis* through a succession of lives, in each of which the lot of the individual self is largely determined by the fact that, *sub specie æternitatis*, it is united to one or more other selves in a relation of love. Moreover, the terminus of this series of lives is found in the final stage of the "C" series,[2] in which the self awakens to the realization of indescribable and unimaginable blessedness.

[1] It is, of course, true that both Buddhism and Jainism acknowledge the existence of a multitude of so-called "gods," but since the term is merely used to denote spirits of the highest rank in the universe, endowed with exceptional power and blessedness, but as much members of the cosmos and as completely subject to its laws as spirits of the lowest order, both religions are commonly and correctly classed as atheistic.

[2] According to McTaggart, time is unreal. Consequently our perceptions of simultaneous or successive events are in fact misperceptions of unchanging entities and the relations subsisting among them. For our percepta in reality form a non-temporal order (the "C" series), each term of which includes within itself all the anterior terms of the series, and is in like manner included in all those posterior.

The similarity which these doctrines bear to those of the Indian sects, of which we have just spoken, is indeed striking. To make the parallel as complete as possible, we may add that McTaggart actually did encourage the practice of mysticism. He believed, as a matter of fact, that he had succeeded in showing that the universe is, on the whole, good; and therefore such as the will of a good man may acquiesce in. Consequently he felt that the claims of religion—unless these were understood to include the existence of an object deserving of worship—were vindicated by his philosophy.

Impressive as these points of resemblance are, however, the dissimilarities are equally prominent. In the first place, McTaggart denies the reality of time. It may be that the logical interpretation of Buddha's teaching[1] would lead us to the same conclusion. But it is none the less certain that vast numbers of Buddhists would refuse to follow us. Furthermore, if McTaggart's theory of the "C" series of included and inclusive terms is sound, it completely shatters all hope of an immediate and individual escape from the illusion of time.

The practical significance of this doctrine is momentous. If the Buddhist is right, it is possible by holy living and by devotion to the practice of asceticism and of mystical contemplation to attain Nirvana in this life, and so at the moment of decease to enter Parinirvana, thereby passing beyond birth and death. Or, if this be pitching one's hopes too high, one may at least aspire to be reborn in one of the heavens with better prospects of attaining Nirvana there. This hope, in all essentials, the atheistic Buddhist shares with the theistic or pantheistic Hindu. For each the way of salvation is the same.

> What is soundless, touchless, formless, imperishable,
> Likewise tasteless, constant, odourless,
> Without beginning, without end, higher than the great, stable—
> By discerning That one is liberated from the mouth of death.[2]

If McTaggart is right, on the other hand, salvation is to be attained only in the final stage of the "C" series, which from the view-point of the anterior stages is perceived as future, and into which, *sub specie temporis*, we all enter together. This theory, as its author has been at pains to point out,[3] in its emphasis upon a state of blessedness which is at once timeless and yet future, markedly resembles the Christian doctrine of heaven. But here again there is a difference which is of the greatest importance. The Christian, at least the Protestant Christian, hopes to enter heaven at the conclusion of this present life. "The souls of believers," as the Westminster Catechism

[1] The same suggestion might well be made in the case of Jainism.
[2] *Katha Upanishad*, Hume's translation.
[3] *The Nature of Existence*, secs. 738–9.

tells us, "do immediately pass into glory." Thus a way of escape is found, not through mystic illumination, but by the prosaic everyday process of dying. Such a doctrine doubtless affords the greatest consolation to those who believe in it. Yet if McTaggart's contention be sound, it is a vain hope. Before each of us stretches the remainder of the temporal process from which there is no escape. From the illusion of time philosophy is helpless to deliver us, but it can at least teach us that it *is* an allusion, and can encourage us with the assurance that the final state of the "C" series is one of very great good.

"Of the nature of that good we know something. We know that it is a timeless and endless state of love—love so direct, so intimate, and so powerful that even the deepest mystic rapture gives us but the slightest foretaste of its perfection. We know that we shall know nothing but our beloved, and those they love, and ourselves as loving them, and that only in this shall we seek and find satisfaction. Between the present and that fruition there stretches a future which may well need courage. For, while there will be in it much good, and increasing good, there may await us evils which we can now measure only by their infinite insignificance as compared with the final reward."[1]

Thus it will be seen that the practice of mysticism offers no short cut to the Eternal. Is it not then useless? To this the reply is undoubtedly—No. But when we seek to discover the place of mysticism in religion and philosophy, and to determine what are its proper functions, the answers to our questions are less obvious. A thoroughly rationalistic spirit pervades the whole of McTaggart's writings. Nowhere do we find an attempt to escape from the toilsome path of argumentation, nowhere is there an appeal to a special illumination. On the contrary, the argument everywhere proceeds in an orderly and consecutive manner, advancing from point to point in conformity with the laws of logic. It is, of course, true that McTaggart does appeal to emotional and volitional experiences for data upon which to base his inferences, but in this there is nothing which distinguishes him from other philosophers who admit the validity of introspection.

Indeed, McTaggart was extremely suspicious of the validity of mystical experiences, and was unwilling to use them as a basis for metaphysical arguments. In his opinion mystics generally see what they expect to see. In an extremely interesting passage in his chapter on "Error and the 'C' Series"[2] McTaggart states his position in regard to the claims of mysticism with characteristic clearness.

"But how about perceptions of God or of the universe? And, in the first place, are there any such perceptions at all in our present

[1] *The Nature of Existence*, sec. 913. [2] *Ibid.*, sec. 523.

experience? It has been asserted by various people that they have had such perceptions. I doubt, however, whether this is a correct account of what they have experienced. No doubt they have experienced something, and, if our theory of the nature of spirit is correct, that experience must really be perceptions; but when they say that they have perceived God, or the universe, they mean that they have had perceptions of them, as distinct from judgments about them, or imagings of them. In the language we have adopted, they are speaking not only of perceptions, but of perceptions which are apparent perceptions.

"In such cases, I am inclined to think, a judgment has been mistaken for a perception. It is not difficult to mistake an immediate judgment that something exists for a perception of that thing. Nor is it difficult to make the mistake, even when the judgment is not immediate, but has been based on reasons, provided that the judgment is firmly held, and is one of sufficient interest to excite a strong emotion in the person who makes it. To the possibility of these mistakes, and indeed to the great difficulty of avoiding them, I believe that most people would bear witness who have any experience of mystical states of mind, and who have the power and the resolution to analyse the states they experience.

"And it does not seem improbable that the cases in which people have supposed themselves to have perceptions of God, or of the universe, are cases in which a judgment has in this manner been mistaken for a perception."

The importance of these paragraphs is enhanced when we recall that the man who wrote them was himself at times the subject of mystical experiences. But it would be a mistake to see in the above passage anything like an unqualified condemnation of mysticism. Nothing could be more foreign to the spirit which pervades the whole of McTaggart's writings than the attempt to banish any problem from the field of discussion by a dogmatic pronunciamento. This is made clear, in the present instance, beyond all shadow of doubt, by the opening sentence of the very paragraph which follows upon those just quoted: "We cannot," he writes, "absolutely exclude the possibility that there may occur, in present experience, a perception of God or of the universe."

This individual sentence, taken by itself, might indeed seem to indicate nothing more than a desire to be scrupulously fair, and an unwillingness to dogmatize. But in reality McTaggart's attitude was by no means merely negative. Not only is the practice of mysticism commended in his writings, but its influence is unmistakably present in his philosophy. To it we owe much of that breadth of vision, that comprehensive outlook, that sympathy with and understanding of the spiritual life, its ideals and its problems, its agonies

and its triumphs, which so characterize his teaching. Nevertheless, it is emphatically true that the place of mysticism is at the crown, and not at the base, of his metaphysical system. It is a beam that shines, not from the point of departure beneath, but from the ultimate goal above. When we have climbed as far as we are able, in that light we may see light.

Mysticism has assumed many forms in the history of religion, but its most characteristic expression has involved the recognition of the supreme metaphysical significance of love. And here McTaggart and the mystic are in complete agreement. But what is love? According to McTaggart, it is "a liking which is felt toward persons, and which is intense and passionate."

"This must not mislead us," he writes, "into exaggerating the closeness of its relation to sexual desire. It is often found in connection with that desire. But it is also found in connection with other bonds of union—kindred, early intimacy, similarity of disposition or of opinions, gratitude, and so forth. And it is also found without any such connection in instances where it can only be said that two people belong to one another—such love as is recorded in the *Vita Nuova* and *In Memoriam*."[1]

It has already been pointed out that love, in McTaggart's system, fulfils a function somewhat similar to that of Karma. It does not indeed carry out the task of rewarding and punishing us in each life for our good and evil deeds in previous lives, but none the less it does furnish the principle of order which determines the environment in which rebirth shall take place. Moreover, as we have seen, it is present in a unique degree in the final stage of the "C" series. It provides, if we may so phrase it, the *content* of salvation. To this thought McTaggart returns again and again. It is in truth the very heart of all his teaching.

"Can we say any more about the value in selves in respect of their final stage? We have seen that it will be one of very great good, if good is to be judged by any one, or any combination, of the qualities of knowledge, virtue, emotion, pleasure, or fullness of life—under which last name we may sum up both amount and intensity of consciousness. Is there anything more?

"I hold, as I have said, that the possession of any one of these qualities makes that good which possesses it. But it seems to me also that those thinkers are right who attribute an unique and supreme goodness to love."[2]

Thus love is the supreme good, yet not the only good. How then is it related to other goods? The solution is as follows:—

"Can we say that love is incommensurably better than any other good? This seems attractive, but I cannot think it is correct. If it

[1] *The Nature of Existence*, secs. 459 and 461.

[2] *Ibid.*, sec. 850.

were so, it would follow that, starting from *any* standpoint—my own at present, for example—the smallest conceivable increase in love would be better than the greatest possible increase in knowledge, virtue, pleasure, or fullness of life. And it does not seem to me that this is true.

"Is there any other way in which love could hold a supreme and unique position? I think that there is. It would hold such a position if it were true that love is capable of being so good that no possible goodness arising from knowledge, virtue, pleasure, or fullness of life could equal it. And it is this view—a view which has been held by many people, mystics and non-mystics—which I believe to be true. It seems to me that, when love has reached or passed a certain point, it would be more good than any possible amount of knowledge, virtue, pleasure, or fullness of life could be. This does not, so far as I am concerned, spring from any belief that I have reached such a point. It is a conclusion which seems to me to follow from contemplating the nature of love on the one hand, and other qualities on the other hand."[1]

From this high evaluation of love follows the important consequence that in so far as we, in our present experience, come to know what love is, in just so far we are acquainted directly and empirically with the nature of the Absolute. In this fashion we actually lay hold upon the very "stuff of reality." It is not a symbol or a manifestation of something more ultimate, it is the ultimate itself. Purified and elevated to a degree of intensity beyond all our present powers of comprehension and imagination as it may be, love, in the Eternal, is nothing else but love. The significance of this doctrine is indeed profound, and its similarity to the teachings of the mystics is sufficiently obvious.

Closely connected with this view is the further theory that in absolute reality selves perceive one another directly. As we are of course aware, this is not the case in present experience. Hence there arises a seeming paradox.

"Love as we now experience it has often been described as an essentially restful state, and also as essentially a state of unrest. The incompatibility of these statements is only apparent. It is essentially restful because it presents itself as something which is sufficient in itself, which needs no justification, which is good unconditionally, whenever it does arise, whatever may be the circumstances in which it has arisen. And it is essentially unrestful because, in proportion as it becomes more intense, we desire, more and more intensely, not indeed anything else but love, but love more intense and more absorbing."[2]

This twofold aspect of love is due to the illusion of time, and to

[1] *The Nature of Existence*, secs. 850–1. [2] *Ibid.*, sec. 471.

the fact that in present experience lovers are unable directly to perceiver their beloved.

"What is it," asks McTaggart, "that they want? Is it just a quantitative increase in the intensity of love? If so, the desire must remain for ever unsatiated, since beyond any intensity of love which was reached there would be a greater intensity which could be desired. But most people who have endeavoured to interpret it have interpreted it, and I think rightly, as a desire for a state whose greater intensity of love will flow from a qualitative difference in the nature of the union, a difference which brings the perfect rest which love here only longs for.

"Some thinkers, especially Oriental mystics, have concluded that love could only reach its goal when the lover and the beloved become identical. But then the attainment would be suicidal. Love would be destroyed by it, since love depends upon a relation between two persons. And does love seek its fruition in anything but love? Surely the truer interpretation is that which looks for attainment, when we shall no more see through a glass darkly, but face to face—when the lover knows the beloved as he knows himself."[1]

Such is McTaggart's conception of the Beatific Vision. In this magnificent outburst of mysticism his philosophy culminates. But what renders it so extraordinarily interesting for us is the fact that a purely atheistic conclusion has thus been reached from premisses which have hitherto been generally regarded as peculiarly favourable to the formulation of a theistic metaphysic. The weapons which were forged in the theist's own armoury have been used against him. A challenge has thereby been presented to him which he cannot afford to ignore.

The content of this challenge is to be found in the implications of McTaggart's positive teaching rather than in the reasons which he gives for rejecting the idea of God. These are indeed weighty, but they are also more familiar and less original. Thus a theism of the Absolutist type is rejected because it involves the assertion that finite persons are included in the being of a single Infinite Person——a conclusion which is incompatible with the proposition—the truth of which McTaggart holds to be self-evident—that one self cannot be a part of another self.[2] And again, the notion of a creative God is obviously incompatible with the doctrine of the unreality of time. For the same reason, the existence of a God who controls and governs the universe is also inadmissible.[3] Nor is it possible that any one self should *appear* to create the universe and other selves, since, "*sub specie temporis*, no self appears to exist before any other self."[4]

[1] *The Nature of Existence*, sec. 471.
[2] *Ibid.*, sec. 491.
[3] *Ibid.*, sec. 495.
[4] *Ibid.*, sec. 494.

It is, however, possible that one self should *appear* to *control* the universe.

"I see no reason why there should not be such a person—a person who was not a God, but who, *sub specie temporis*, and from the standpoint of our present experience, appeared as a controlling God. And such an appearance would be a *phenomenon bene fundatum*. The statement that there was a God would not be true, but it would have as close a relation to the truth as the statements that there are mountains in Switzerland, and that thunder follows lightning."[1]

It may be said without fear of contradiction that, even did McTaggart's system make a place for such an apparent God, it would still deserve to be styled atheistic quite as much as the systems of the Jains and the Buddhists. But as a matter of fact McTaggart holds that, while the existence of such a being is abstractly possible, there is no evidence to show that its existence is actual.[2]

When, however, we turn from these negative conclusions to the positive aspect of McTaggart's teaching, it becomes fully evident that he has yet another, and possibly more cogent, reason for rejecting the theistic hypothesis. In his eyes it is, if not utterly incompatible, at least not easy to reconcile with the unique value and importance which he attributes to human love. At first sight such an opinion may seem extraordinary in view of the teaching of the mystics. But it is to the mystics themselves that one may appeal in support of it. For many of them, Christian, Moslem, and Hindu, the love which served as the single motive-power and inspiration of their lives was the love, not of man, but of God. Thus the Sufi, Rabi'a, replied to the question whether she hated the Devil with the answer that she was "too much taken up with loving God to love or hate anything else." Similarly in the writings of such famous Christian mystics as Ruysbroeck we find it laid down that the creatures are to be loved "for God's sake." To love any finite being for its own sake was apparently deemed worldly. Nor was such an outlook by any means wholly due to an ascetic pervertion of the primitive Christian message. In the very words of Jesus, which are held by many to embody the essence of his teaching, we are commanded to love God "with all our heart, and with all our soul, and with all our mind, and with all our strength," but our neighbour "as ourselves."

In this connection the history of Sufi mysticism is of especial interest, for there we see human love accorded ever a higher and higher place even as the stark monotheism of Rabi'a and the early devotees gradually expands into a pantheistic monism. In primitive Sufism God seems to have been regarded as the only legitimate

[1] *The Nature of Existence*, sec. 496 [2] *Ibid.*, sec. 499.

object of love.[1] Gradually, however, human love came to be looked upon as an indispensable initiation into the love of God. In the words of Jalalu'd Din Rumi:—

> Whether it be of this world or of that,
> Thy love will lead thee yonder at the last.[2]

Viewed in this light, such love is rather a means to an end than an end in itself. But Pantheistic fervour could not be restrained from pressing on to a third stage in which the individual loved is identified with God, and human love therefore given a supreme value. The term God, however, in this connection is to be understood to mean, not a personal being, but ultimate reality (al-Haqq).[3]

The similarity of this position to that of McTaggart is unmistakable, as he himself clearly recognized. His sympathy with it was shown, not only in his fondness for Attar's famous poem, *The Colloquy of the Birds*, but in the distinction which he was accustomed to draw between theistic and atheistic mysticism, and in his declared preference for the latter.[4]

The issue which McTaggart has raised, implicitly rather than explicitly, but none the less forcefully, is one of fundamental importance for the theist. Can Theism afford to accept his evaluation of human love? Many doubtless would assert that it can. But the view is not without its difficulties. If there be in truth a God who

[1] Professor R. A. Nicholson has translated the following account of an incident in the life of Fudayl ibn 'Iyād, which, as he truly says, would be touching if it were not so edifying: "One day he had in his lap a child four years old, and chanced to give it a kiss, as is the way of fathers. The child said: 'Father, do you love me?' 'Yes,' said Fudayl. 'Do you love God?' 'Yes.' 'How many hearts have you?' 'One.' 'Then,' asked the child, 'how can you love two with one heart?' Fudayl perceived that the child's words were a divine admonition. In his zeal for God he began to beat his head and repented of his love for the child, and gave his heart wholly to God." (*The Mystics of Islam*, p. 109.)

[2] *Ibid.*, p. 109.

[3] Thus the poet just quoted could also write,

> Ye who in search of God, of God pursue,
> Ye need not search, for God is you, is you!
> Why seek ye something that was missing ne'er?
> Save you none is, but you are—where, oh, where?
> *Ibid.*, p. 119.

[4] McTaggart was quite content to have his system described as pantheistic. But it was not pantheistic in the same sense as the systems of Spinoza or Bradley, for instance, in which the self enjoys only an apparent or adjectival existence. For McTaggart the self is real, substantival, and eternal. It is, however, an atheistic pantheism, since in his opinion the term God should be used only to connote *a personal being* who is supreme (*Studies in Hegelian Cosmology*, sect. 96; *Some Dogmas of Religion* (second edition), sects. 152-3.) Any attempt to employ it in a wider sense could, he held, result in nothing but misunderstanding and confusion.

is infinite in beauty and goodness, is it not inevitable that those who are privileged to behold him should lose themselves in the rapture of that vision to the forgetfulness of all human beings? On the other hand, is it not to be expected that those who find in the love of other finite personalities the satisfaction of all that is highest in their natures and the crown of their desires, should recoil from the suggestion that such love is not an end in itself, but only a means to the attainment of some more ultimate good? And if love of God is just as good as, but no better than, love of Smith, does it not follow that God is only one person among other persons, and so not really God at all? If the theist is to answer these questions satisfactorily, it would seem that he must show that love for God and love for individual human beings are so related that neither can reach its full development except in conjunction with the other.

Theism is, of course, compatible with the rejection of McTaggart's estimate of the value of human love. Probably few theists, however, would care to associate themselves with Fudayl ibn 'Iyād in his attitude of unqualified condemnation of it. For those who concede that it possesses *some* value, two alternatives present themselves. Either love for human beings must be regarded as a mere initiation into the love of God, as a necessary but preliminary stage through which the soul passes on its way to the ultimate goal—in other words, as the means to an end—or else it must be treated as an end in itself, but yet a subordinate end, as a genuine but inferior good.

The former alternative will at once involve those who embrace it in a contradiction. Loyalty and constancy are of the very essence of love. In loving we identify our own interests and fortunes with those of our beloved, and in so doing find the deepest satisfaction of which human nature is capable. The suggestion that inducing and cultivating such love can be a purely temporary measure adopted with ulterior ends in view betrays a complete ignorance of its fundamental character. Surely loyalty to God cannot be learned through disloyalty to man.

Clearly then it is the second alternative which the theist will chose. He will recognize human love as an end in itself; nevertheless, he will contend that it is not "the chief end of man," and that supreme value is to be found in love for God alone. But in doing so he will stand on very slippery ground. If love for God exceeds in value love for any finite being, will it not inevitably attract to itself the interest and devotion of the worshipper in such measure that little love will be left to bestow upon any other object? A modern student of mysticism has admitted that "the impoverishment of ordinary human affections in response to the exclusive demands of the divine is responsible for an element of hardness in the mystical character in human relationships towards which the ordinary man finds it

difficult to be sympathetic."[1] Now this could not be true of an atheistic mysticism. The question is whether it is true of all types of theistic mysticism.

Furthermore, it seems quite impossible that those who have once experienced that emotional concentration of the self which an "intense and passionate" human relationship can evoke could conceive that love for God can surpass it. It is difficult to see how the theist can assert the contrary without committing himself to the proposition that the value of an emotion is determined by the nature of its object. And this is at least open to question.

It is not my purpose to attempt to answer these questions, but to raise them—to make clear the vital importance of McTaggart's conclusions for any theistic philosophy. For this reason I have made no attempt to criticize the chain of arguments by which he arrived at them. These arguments may be proof against all attempts at refutation. If this be the case, his conclusions will receive additional weight; but if the logical structure collapse, it will not of course follow that they have been thereby disproved. As mere hypotheses they are in the highest degree stimulating and suggestive. But above all there remains McTaggart's estimate of the worth of human love in and for itself. This is not based on any argument. It is a direct judgment of value. And it is this insight which constitutes the supreme value of his philosophy.

[1] R. H. Thouless, *The Lady Julian*, p. 116.

PHILOSOPHY AS CRITICISM AND POINT OF VIEW

ADRIAN COATES, M.A.

LAST year the B.B.C. arranged for certain eminent men to broadcast their Points of View to the public. The result was a most interesting series of talks; but for the sceptical philosopher the series was chiefly entertaining for its brilliantly illustrating the old tag: *quot homines, tot sententiæ*. One was struck not merely by the discrepancy of opinion, but by how each speaker was 'true to type': the biologist, the physicist with a taste for spiritualism, the Christian Platonist, and the rest—each spoke his part and told of a world built according to his own particular measuring-rod.

This lack of agreement between intelligent and honest men on the most fundamental questions of life and conduct is of course a common-place as old at least as Timon of Phlius; but the problem presented by it is more urgent and contemporary to-day than it ever has been. It is unnecessary to dilate upon the well-known tendencies in modern thought to question or ignore the claims of any rationalistic, absolutist philosophy: it will be enough to illustrate my reference by a typical quotation from Dr. R. G. Gordon's authoritative work on Personality. Discussing the question of the relationship between Mind and Body, he notices "in what different ways individuals react in their thoughts and feelings to events, theories, and objects; and how impossible it is for those of different types to appreciate each other's point of view." "Such being the case," he concludes, "it is inevitable that there must be differences in the way in which the relationship of Body and Mind appeals to various types of persons." There one has the modern empirical attitude which dismisses philosophy as no more than a 'point of view,' valuable perhaps to the person who holds it, but with no further claim to anyone's regard.

I cannot help applying this kind of reasoning to myself. When I consider the development of my own philosophical standpoint, I am bound to recognize that it is the product of my own individual history and temperament, and that if *they* had been other than they were, it would hardly have been possible that I should now hold the opinions which I do hold, and which I am prepared to defend against all comers. Yet if one's opinions are but an expression of one's personality, in what sense can one claim them to be true? To opinions so based the notion of truth seems inapplicable.

I suppose the conventional answer to this sceptical attitude is, that if pressed to its conclusion it would lead to the denial of the possibility of all knowledge, and that if we are to hold any opinion whatsoever we must assume that the individual is able to rise above his limitations and 'know the Cosmos as it is.' But this sort of argument will not have any force with those who deny that there is a Cosmos, and moreover it ignores a large class of facts which it is necessary for philosophy in some way or another to take account of. We can point out certainly to the empirical scientist, as Burtt points out in the case of Newton, that "there is no escape from metaphysics, for every statement involves certain metaphysical postulates; and the most dangerous person is the one who talks metaphysics without realizing the fact." Similarly we can point out to the irrationalist of Mr. Aldous Huxley's type that insomuch as he condescends to argue or present a case he is *ipso facto* assuming what he is trying to disprove, that is, the possibility of arguments and opinions having some basis independent of the individual's moods and fancies. So too the pragmatist, who defines 'truth' by just such a 'trick of logic'[1] as he condemns the orthodox schools for, is compelled continually to assume that the word has an intrinsic meaning of its own.

But arguments of this sort have only a negative validity. We can insist that there are facts, and that the words 'true' and 'false' must at any rate sometimes mean what they are commonly supposed to mean; but one such fact is, that philosophical opinions can be treated as expressions of personality in a way that scientific opinions cannot be. We are presented with the vicious circle:—

> There are facts, and true opinions, and knowledge;
>
> All particular opinions, scientific or otherwise, presuppose other more general philosophical opinions;
>
> Philosophical opinions depend in the last resort on the individual temperament and point of view.

This circle can be broken only if we are able to re-define our terms in such a way as to reconcile the logical, factual aspect of Truth and Reality with its relative and personal aspects.

II

The last April number of the *Journal* contained two papers on the present trend in philosophy, one by Professor Wilbur Urban and the other by Dr. Kohnstamm, which, though otherwise diametrically opposite in outlook and intention, are at one in recognizing that

[1] Cf. Dewey's *Experience and Nature*, p. 2.

in recent years a fundamental change in our modes of thought has taken place, and that to meet this revolution we need "a new evaluation of the human intellect and its logic." But while Professor Urban contents himself with a mere negative polemic against Modernism in all its forms, Dr. Kohnstamm boldly outlines "some of the most essential features of the new philosophy which I hope will be built by the coming generation." The first of these essential features is the recognition of "Personality as a Constitutive Category of Reality"; and he further concludes that "we have to face the problem whether there is only one Truth or a plurality of Truths, perhaps as many as there are types or even individuals in mankind," and that "perhaps the most necessary thing we want in philosophy is to know what is provable and what is not provable."

These expressions of opinion seem to me profoundly significant. Speaking of the Copernican revolution in astronomy, Dr. Kohnstamm remarks that "there came about not a *disproof*, but a *collapse* of the older view; it was *weighed* by an increasing number of experts in the field and found too light." Similar words might be applied to the revolution in scientific and philosophic thought which is taking place to-day. It is no use appealing, as Professor Urban does, to the 'natural light of reason' and to the necessity of a 'rational and intelligible world,' when these conceptions have been already discarded by a large section of enlightened opinion. The time is approaching when the claims of the older types of philosophy will be disputed no longer, but simply ignored. Philosophy must adapt itself to the new conditions as it adapted itself in the seventeenth century to the theories and discoveries of Galileo, and Dr. Kohnstamm outlines in a masterly way some of the essential features of such an adaptation.

But the conclusions which he reaches raise on a wider scale the problem which I have presented in a small, personal way. When he asserts that "the question whether we ourselves will accept this [or that] whole outlook on the world and life cannot be decided on rational grounds alone," we are led to raise the further question: How far and in what sense can any philosophical opinion claim to be rationally valid? If we have to abandon the old absolute view of Truth, it does not seem to me that the pragmatic or 'illusionist' view will provide a satisfactory substitute; and Professor Urban's protest against the modern cult of the unmeaning and unintelligible supplies within certain negative limits a necessary corrective to what might be called the present 'flight from the rational.' We need, not only to restrict, but to consolidate the claims of reason, and to justify philosophy by re-defining its function. Dr. Kohnstamm's article has encouraged me to try to make some contribution towards this task along the lines which he has himself suggested.

III

Professor Urban attributes the present revolt against the traditional ways of thinking to sheer irresponsibility and perversity, but this hardly goes to the roots of the matter. We have to recognize (1) that there has been an 'irrational streak' running through every development of philosophy; and (2) that the present disillusionment is the natural and direct result of the failure of rationalistic philosophy to justify its own professions. Its claim has been to discover and establish 'eternal verities' on strictly logical grounds; but a single error in a process of deduction must render logically invalid every conclusion reached thereby, just as a single mistake in mathematics may produce not only a wrong solution, but one which is the exact reverse of the correct one; and it is indisputable that there is no positive system of philosophy which is free from logical errors. By logical errors I mean such simple things as Equivocation, Amphiboly, and Begging the Question—as, for instance, Hegel's equivocal use of the word *Wesen*, which lies at the root of his derivation of Essence as the second main moment of the self-determination of Being; or Mill's ambiguous use of the word 'desirable' on which he relies to prove that pleasure is the chief good. Every philosopher has made mistakes of this kind; so that if the value and appeal of systems of philosophy depended on a strictly logical criterion, we should have to dismiss them all as equally unproven. If Professor Urban finds Plato and Hegel rational and intelligible, Vaihinger and Bertrand Russell irrational and unintelligible, that surely is because the former employ a universe of discourse which is familiar and sympathetic, the latter one which is strange and distasteful. But for others the rôles might be reversed.

If we are to justify the claims of the reason we must be at once more modest and more ruthless. We must recognize the inescapable limitations of argument and logic; and this recognition will involve a more radical self-criticism than any attempted by the logic and epistemology of the Classical Tradition. Logical proof is limited to arguments depending on agreed assumptions, is always, that is to say, hypothetical in the same way that a mathematical deduction is. This means that proof must always be relative or 'immanent,' since it depends on our accepting the assumptions on which the argument is based; and there is probably no set of philosophic axioms which every school and individual is prepared to accept. As different systems of geometry can be built up from different sets of axioms, so different points of view in philosophy might conceivably be developed which contradict each other but are not internally self-contradictory. It is of course well known that disputants whose

points of view differ too radically are unable to find any common ground of argument: they are like men speaking different languages.

It is a question, however, whether even within these limits strict logicality is a practicable ideal, because the difference between individual points of view cannot be expressed in terms of a definite set of axioms or assumptions, but rather permeates the whole field of discourse. Logicality depends primarily on univocal definition of terms, which in philosophical discourse has never been attempted, and is an ideal to which it is probable we can at best only approximate. The degree of approximation is the limit of possible immanent logicality of any positive system of philosophy.

But if proof must always be relative, disproof can be absolute, in the sense that a logically unsound argument can always be refuted by accepting the assumptions on which it rests and showing that the conclusions do not follow as they are supposed to follow; so that a philosophical conclusion can be absolutely false, though it cannot be absolutely true. This suggests a distinction between Criticism and Point of View which may be a first step towards reconciling the claims of Truth and of Personality. The rôle of philosophy as a 'critique of prejudices' has of course always been recognized, and the most important work of philosophers has often been more destructive than constructive; but criticism has generally been closely combined with constructive argument and used as a means of establishing positive 'truths.' But if a positive theory must always contain certain irrational elements, it follows that the positive and negative functions of philosophy are not only different but disparate, and that in philosophy there can be no proof by exhaustion. Philosophers cannot of course be content with a merely negative rôle, and even purely destructive criticism must have some positive personal basis; but in view of the present tendency to resolve all rational grounds into an expression of personal prejudice, it is perhaps worth while to insist on the negative validity of logical criticism, and that the philosopher here performs a function which the empirical scientist is not always able to perform for himself.

My major conclusion is that for the limited negative sphere and for the wider positive sphere we require two separate definitions of 'validity.' The positive will have to include the negative, but go beyond it.

IV

The classical logic has been criticized on various grounds, but its most fundamental defect seems to be its misrepresenting the function of language as essentially rational and indicative: it assumes, that is to say, that any sentence which has the grammatical form of a statement must have some definite objective frame of reference.

It may be said that logic is not linguistics, and that any science must of necessity neglect the irrational elements of its subject-matter. But it is just this neglect of the irrational and expressive elements in thought and language which has obscured their presence within the body of speculative philosophy; and it is undeniable that any system of logic involves certain assumptions about the nature of reality itself. The first assumption of the uncritical person (or perhaps we should rather say, of the uncritical modern European) is that every noun he uses is 'the name of something,' and that every statement he makes is a statement of fact: he assumes, that is to say, that Reality is an external system to which all language necessarily conforms. This same assumption lies behind the classical logic and philosophy. Thus meaning is limited to factual meaning. Judged by such a criterion, a large amount of constructive philosophy has to be dismissed as simply meaningless.

We must start by recognizing that both language and philosophy itself express and interpret the whole of our experience, and that the category of fact is only one aspect of the whole. Facts belong to the cognitive sphere of experience, and to what in that sphere is common and indifferent, that is to say, to the more particular and quantitative interpretations of it; since the wider unmathematical interpretations begin to depend on the personality of the interpreter. The boundaries of this sphere are indefinite and variable, and, however they may be extended by the methods of science, must always remain so. Scientific knowledge, however far it extends, can never transcend the human personal reference. Recent advances in science itself have forced the recognition of this limitation, and so brought about the collapse of the older view of Nature as a 'closed system' external to the observer. This conception, as Dr. Kohnstamm points out, underlay equally the quantitative monism of the classical mechanics and the epistemological monism of the Kantian philosophy.

From this view, which assimilates the whole of experience to the perceptive type of it, we escape by recognizing Personality as a 'Constitutive Category of Reality.' The focus of Reality is shifted. The realism (in the Platonic sense) which underlay all attempts to define Reality in terms either of Matter or of Mind or 'Objective Spirit,' which regards Reality as a self-subsistent system transcending in some way or other the individual, has to be discarded.[1] Individual personality becomes focal, which not only perceives but acts, creates, and appreciates. Thus the subject-object relation, which belongs to

[1] It is worth noticing that the word 'Reality' signifies primarily 'thingness' or 'objectivity,' so that the very use of the word in this inclusive philosophical sense tends to prejudice our judgment. The argument might perhaps be better expressed if we used the word 'Being' instead, and said that Reality is only a single phase or aspect of Being.

the category of fact, is seen within the category of value to be inapplicable, since conduct and moral judgment belong to the active, not to the cognitive sphere of personality; and the opposition between Nature and The Moral Law is reconciled not in some transcendental realm of ideas, but within the experience and character of the individual man. Allowance has to be made both for what in our experience is private, or at least not common to all (there are, for instance, the limits of nation, of class, of family, as well as of the individual), and for what in our experience is public but not factual; and the different categories of meaning have to be distinguished accordingly. A statement of the form 'A is B' may indicate a fact, but it may express a point of view which is not in the last resort reducible to the category of fact; or it may assert a value which has meaning and reference within the sphere not of fact but of conduct.

Both Pluralism and the relativity of all Truths and Values seem to be a necessary consequence of this shifting the focus of Reality. Monism may indeed be a possible point of view among others; but it seems doubtful, to say the least, whether any monistic system could logically adjust itself to such a position. Fichte at the time of his death was intending to write one more book in which the truth of his philosophy should be demonstrated for all time, so that no one could do anything but accept it. That is the true spirit of the absolutist; but in these days such an attitude is becoming more and more impossible to maintain. A Monist who is willing to allow that those who disagree with him may be neither stupid nor malicious is already on the road to Pluralism.

But though the Pragmatists may have the better of their opponents on these two points, they are hampered by their instrumental theory of truth, which deprives their arguments of any sure basis in logic and language. What is needed is not a single particular definition of Truth—since the long labours of many eminent thinkers have shown that any such univocal definition is an impossibility—but a classification of the kinds of Truth. Dr. Kohnstamm indeed suggests that there may be as many Truths as there are types or even individuals in mankind. But while we may insist that Reality varies from individual to individual, and that there can be no Reality lying altogether outside all personal reference, it seems to me that by making Truth private to the individual we run the risk of depriving the term of all meaning and of falling into a self-contradictory solipsism. Plurality of Truths must depend not on the heterogeneity of individuals, but on the heterogeneous phases of the common human experience. There is the practical or instrumental truth that the pragmatists have made so much of; but there is also the factual truth, and the mathematical truth, and the moral truth. Truth must

be aligned with meaning; and both Truth and Meaning must vary according to the different forms and levels of experience.

Since philosophy aims at including and expressing every aspect and level of experience, it follows that its validity must be multiplex. In the sphere of facts it must be true factually, in the moral and human sphere it must be morally valuable, in the use of argument and language it must be valid logically. A Point of View will claim to be 'true' not in an absolute but in an inclusive sense. (Or we might say that 'validity' includes 'truth,' but goes beyond it.)

V

By dissociating our idea of Reality as a whole from that phase or aspect of it which is the matter of common-sense perception and of scientific knowledge, and by freeing the idea of Value from an absolute, external reference, we come to revise our notion of philosophy itself, as being in its positive function not so fundamentally representative as it is expressive and constitutive, resembling in this respect all other activities of the individual will. In presenting his Point of View the philosopher is not merely 'stating facts,' nor yet providing for himself or others a 'working hypothesis,' but is rather trying to remould the existing intellectual framework of Reality. If Reality has always a personal focus, then there can be no philosophy which is not personal, and there can be no question of a philosopher 'transcending the limits of personality,' since that would be the same thing as transcending the limits of Reality. It is not a case of contemplating the Timeless: it is a case of creating the future. That has actually been the rôle of all past philosophers. The significance of Plato depends on the fact that we still live in a partly Platonic world: his Point of View has become a common element in the experience of Europeans; so that he ranks historically with such men as Cæsar and St. Paul, and such others as have left the strong impress of their personality on future generations.

So too when we try to solve the question of how the impersonal, logical, and factual elements of thought and language are to be accommodated to the personal element, we realize that the solution itself must fall within the personal frame: that is to say, it will be more like the solution of some practical problem than of some question of fact or of mathematics. Within the limited sphere of fact and of logic there can be no 'inventing the truth,' and any distinction between *my* solution and *the* solution is pointless. But a Point of View transcends the limits of objectivity, and the individual framework of Reality only becomes *the* framework of Reality in proportion as it is adopted as such by all.

Yet the individual must claim that his Point of View is valid in

both an inclusive and a rational sense. Inclusiveness and rationality are the extreme terms of any philosophy, and we have to recognize that these terms are to some extent mutually exclusive. Dr. Kohnstamm declares that "the more we approach these deeper layers of the soul, the greater is the need of harmony between verbal expression and sentiment, but the more difficult is its fulfilment." That is an admission, it seems to me, of the necessary limitations of any philosophy. Only in so far as experience is rationalized can it be expressed philosophically, and in so far as it can only be expressed poetically it lies outside the range of philosophy. That is not to say that the ideal of the 'whole man' is necessarily a delusion, and that we must resign ourselves to feeling and speaking in opposite ways on different occasions: it is rather that no one individual can include within himself the whole range of experience or Being, and that in order to achieve unity and harmony the personality can be organized in other ways beside the pre-eminently rational or intellectual way. The artist-philosopher will enjoy (presumably) a fuller existence than the mere artist or mere philosopher; but such a one cannot achieve harmony except by being something less than a full artist and full philosopher—that is, in so far as we identify philosophy with rationality.

Such an identification is becoming more necessary, since Reality itself tends to become more rational and less poetical as we grow older in civilization. There may be loss as well as gain in that; but it is not the part of philosophy to protest against a tendency which is in accordance with its professed aims. The old rationalist standpoint has indeed fallen into disrepute, not, as I have argued already, because it was 'too rational,' but because it was not rational enough, claiming to be rational where it was in practice poetical. So from the Hegelian extreme of identifying the Rational and the Real we have swung now to the other extreme of holding Reality to be fundamentally irrational. But if we make personality the focus of reality, that means that the question of the rationality of the real is simply a question of our own rationality, and the degree of it will vary as between individuals. Therefore he who proclaims the irrationality of the real is trying to persuade us first and last of his own irrationality and love of the irrational. The old notion of man as potentially a purely rational being has indeed gone by the board; but that is no reason why we should deny to ourselves powers which we are in practice constantly claiming to possess. The validity of the reason within certain limits has to be taken for granted in the same way that we now take for granted the irrational basis of opinion in temperament and education. It is not a case either of identifying or of opposing the Real and the Rational, but of adjusting the place of the rational within the framework of Reality, and at the

same time the place of all schemes of Reality (philosophies or Points of View) within the framework of the rational.

The limits of rationality mean the limits of fact and of logical thought and language—one might speak of these as the positive and the negative limit. The sphere of fact is neither definite nor self-contained; but no philosopher, whatever his Point of View may be, can neglect the findings of the scientist nor deny their (limited) significance. He may question the more general conclusions and assumptions of the specialist, but he accepts the general body of scientific knowledge as constituting at least one aspect of Reality. On the other hand, the supposed contrast between empiricism and rationalism depends on treating the world of scientific fact as self-contained, which it is not; and the empirical attitude is itself one among many possible Points of View. Since the sphere of fact has been and still is being extended by the method of Science, it can be said that our modern Point of View has wider rational grounds than philosophic systems of the past. It is in this sense that Reality itself is becoming more rational; and the positivist view of the relation of science to philosophy seems to be so far correct. But however widely the circle of scientific knowledge may be extended, it will always be the circumference to a personal human centre. Knowledge of facts is not knowledge of Reality (in the wider sense of 'Being' or experience), but an aspect of Reality, which is both known and given and created in experience as a whole.

The limits of logical proof and meaning are more vague even than are the limits of fact. Ambiguity and unintelligibility have always been the bane of philosophers, and the case is perhaps worse to-day than ever it has been. There are many reasons for this: perhaps the fundamental one is that Reality, while it is becoming more rational, is at the same time becoming more individual. In past ages there has always been amid all differences and oppositions of opinion a background of agreement upon certain fundamental assumptions: there existed, that is to say, a certain common intellectual framework of Reality. This framework has now collapsed. Persons differ from each other more radically to-day in 'make up' and Point of View than they have ever done in the Past, and between individuals of utterly different ways of thinking there is no discernible common ground whatever. Reality has become more heterogeneous, and that means that the scope of philosophy is more restricted, and intercommunication far more difficult. Nothing is more common in present-day philosophic criticism than the confession and complaint: 'I cannot understand.' For myself I must confess that time and again I have to break off my philosophic reading in a daze of uncomprehension. It is easy of course to point out that profound thoughts are always difficult to grasp, and that what is new requires time to establish itself; but that argument, though true enough as

far as it goes, does not cover the whole ground. The critic of a recent work of so-called philosophy,[1] after confessing that a large part of the discussion is utterly unintelligible to him, ends by remarking how "each modern prophet has his own private vocabulary; yet he implicitly claims universality for his findings." There one has it—the claim of an individual Point of View to be true in an absolute, factual sense. If philosophy is to progress with the times, this claim, which is based on a mistaken view of the function of philosophy and the nature of Reality, will have to be abandoned.

But this is not enough: we need a new Logic of Meaning, a far more stringent inquiry than any attempted by the Classical Logic into what is logically permissible in linguistic usage. It is of course true that the language of philosophy can never have the ideal accuracy of a mathematical symbolism, since such accuracy is obtained only by the neglect of every element in experience except the quantitative; so that an attempt to express Reality in terms of mathematical logic (which is what, for instance, Mr. Bertrand Russell tries to do) must result in leaving out of the account all that is humanly most significant. Again, whereas in scientific and historical writing there is always a factual reference, the philosophic Point of View transcends, and so escapes, that reference, and the creative function of philosophy seems to involve a personal and creative use of language; for language itself is a constitutive factor of the intellectual aspect of reality. But if the language of philosophers can never attain a strict scientific accuracy and the method of Spinozistic deduction represents an impossible ideal, it is all the more important to decide what is *not* allowable to a writer claiming to use language logically: just because philosophy transcends the factual reference the question of Meaning is crucial. Unless we have some impersonal touchstone of intelligibility, we shall be unable to distinguish philosophy from the systems of the theosophists, or from the Prophetic Books of Blake: we shall be unable to distinguish profundity from gibberish. This touchstone must be sought in what Professor Urban calls 'natural language and the logic underlying it.' Professor Urban seems to assume that a well-established criterion of logical usage already exists, but the very fact of the present 'confusion of tongues' in philosophy is evidence that this supposed criterion is inadequate. A common 'universe of discourse,' without which contact and argument between different Points of View are impossible, can be attained only by limiting much more strictly the bounds of logically permissible usage, by a more ruthless criticism of vague and undefined phraseology and tricks of equivocation and hypostatization—in short, by a new Logic of Meaning, which would make philosophy itself more rational and less inclusive.

[1] *Death and Renewal*, by Paul Bjerre. Cf. *The Times Literary Supplement* for August 8, 1929.

AN OUTLINE OF GENETIC PSYCHOLOGY

ACCORDING TO THE THEORY OF INHERITED MIND

R. F. RATTRAY, M.A., Ph.D.

ONE of the great difficulties in effecting a synthesis of experience is the contradiction of the apparently mechanical character of the physical universe on the one hand, and the sense of freedom we associate with life on the other. In our own persons, we are told by medical science, or some of it, we are governed by physiological laws which are mechanical, as distinct from vital, in their nature. The best reconciliation of these with freedom, in the writer's opinion, is the philosophy of Samuel Butler. In studying freedom as experienced by human beings Butler pointed out that a large number of practices which are apparently mechanical are really habits that have become stereotyped, and he drew attention to the fact that human actions can be classified as follows:—

> I. We are most conscious of, and have most control over, such habits as speech, the upright position, the arts and sciences, which are acquisitions peculiar to the human race, are always acquired after birth, and are not common to ourselves and any ancestor who has not become entirely human.
>
> II. We are less conscious of, and have less control over, eating, drinking, swallowing, breathing, seeing, and hearing, which were acquisitions of our pre-human ancestry, and for which we had provided ourselves with all the necessary apparatus before human history began, but which are, biologically speaking, recent.
>
> III. We are most unconscious of, and have least control over, our digestion and circulation—powers possessed even by our invertebrate ancestry and, even biologically speaking, of extreme antiquity.

Taking one of these functions, breathing, Butler pointed out that it is an action apparently acquired after birth, with some little hesitation and difficulty, but in a time seldom longer than ten minutes or a quarter of an hour. There would seem to be a disproportion here, he says, between, on the one hand, the extreme intricacy of the process, and, on the other, the shortness of the time taken to acquire the practice, the ease and unconsciousness with which its exercise is continued from the moment of acquisition.

Butler says that it looks like the repetition of a performance by one who has done it very often before, but who requires just a little prompting to set him off, on getting which the whole familiar routine presents itself before him and he repeats his task by rote. Butler's argument is that the baby learnt to breathe in the persons of its ancestors right back in remote biological times; that the baby is one and the same person as each and all of its ancestors, through whom this accumulating personality has gone; and that this person has been repeating the process of learning to breathe whenever he finds himself in the stage in the recapitulation at which learning to breathe is called for; but the innumerable repetitions have facilitated the process enormously—indeed, it is repeated *in epitome* merely.

Learning to breathe is only one of the functions referred to above, and they are, in turn, representative of vastly more. But they belong to a historical sequence. Learning to breathe, for example, is only one incident in the operation of the Law of Recapitulation—the law that each individual living thing in its growth exhibits features which were characteristic of stages in the ancestry, more or less in the order in which they were acquired.

There is a considerable accumulation of evidence—I will make Professor MacBride stand sponsor[1]—that the ovum and spermatozoon carry over an epitome of the ancestral memories of the whole of their ancestries.

An act leaves some trace in the actor. By repetition this accumulates. The trace becomes a tendency. As regards the development of a new organ, the emergence of a character, all we know is that by repetition of the action, the muscle, for example, develops. The tendency can become so powerful that it can anticipate and bring about formation of the structure required before the actual action of the habit appears.

In repeating in our minds in the usual way a series—for example, a list of events in chronological order—we find that there are units or patches that, for some reason or other, stand out. So, it would appear, in the recapitulation of ancestral memories patches stand out. The earlier in the series the data are, they are the more secure and stereotyped because of the greater repetition, and have become unconscious in corresponding degree. The infant becomes conscious as he emerges to less often repeated experiences.

It is readily objected to the memory theory that, if it were true, we ought to remember individual experiences in the lives of our ancestors. But great repetition is necessary for inheritance, and then it is unconscious or nearly so. The individuals in the ancestry have been merged into one: experiences have become experience.

In each generation the primordial ancestor, in its myriad descen-

[1] See his *The Idea of Memory in Biology*.

dant impregnated ova, begins to pass rapidly and in "unconscious consciousness" along all the mnemic paths made by all the lines of descent from it—through all the earlier stages of evolution, of which there has been vastly repeated experience; but when it comes to those parts of the courses that have been less trodden it becomes conscious; still, however, where the courses are plain, retaining "unconscious consciousness," as in breathing, digesting, etc.

A sequence of individuals, a species, may initiatively solve problems of living or of adding to its life. It may come into a condition of contentment and cease to progress. It is capacity for new adaptations that counts—not so much the new situation as the new adapting, whether in reaction to environment or initiatively.

Mind and Matter

We cannot explain the rise of experience in inanimate matter. Suppose we look at the problem on the hypothesis that mind can use matter, that mind is not dependent on matter for existence. Suppose an act of consciousness (including will, of course) sets up a vibration which is characteristic of, peculiar to, that particular act of consciousness. This vibration is, as it were, a sort of physical reflexion of the psychic phenomenon.

Around (on this hypothesis) are all sorts of organizations of vibrations, on the one hand, with "minds" corresponding to them, on the other. Now let us view the situation of a psychological "organism" with an organization of vibrations corresponding to it. Vibrations come to it from without. If the subject's vibratory organs vibrate to harmonize with the external vibrations, and if the mind is attuned to receive the psychological experiences corresponding to the vibrations, the psychological experience becomes the experience of the subject (although coloured by subjective factors). Suppose there are two entities, A and B, which come into contact. If A or part of it can enter into B and become identified with B, the process that we designate as assimilation has taken place. Identity depends on the power to maintain characteristic phenomena.

Protoplasm, said Samuel Butler, is what it is because, for a comparatively gross mass of vibrations, it vibrates readily, whilst, on the other hand, it is sufficiently consistent to maintain identity as against surrounding phenomena.

Evolution of Mind

Let us consider the "original" cell of protoplasm. Cytologists now say that the "simplest" protoplasmic cell manifests an organizing power and purposive striving.

In order that a cell may live, it must assimilate other bodies. Assimilation may be said to begin with touch. Here is the gate through which, physically speaking, the not-self passes into the self.

Amœba has been "fed" with grains of chalk, and, after trying to assimilate them a few times, has rejected them. Professor Jennings has said, "If Amœba were the size of a dog, no one would think of denying to its actions the name of intelligence."[1]

A "simple" cell is dependent on extent of surface of its body for adequate acquisition of food and air. But it is a physical fact that as a body grows larger its surface proportion to bulk diminishes. In the growing cell, therefore, there is increasing bulk to be maintained through a surface which is, in proportion, diminishing. There is, consequently, a growing tension, and there is a working maximum size. Further growth is attained by the cell splitting into two or more parts.[2]

When two cells unite, this of course hastens the crisis which brings about the splitting.

Aggregation of cells takes place. Co-operation of the cells in aggregation takes place. Specialization of cells in the organization follows. Surely this cannot be understood without the hypothesis of a unified mind operating for the whole with co-operation from groups of minds.

For the purpose of propagation of the organism, "simple" cells are retained in simple form, but imbued with the differentiated functions of the whole organism.

In the evolution of the animal body, organs not only performed their originally acquired functions, but could also be the correlates of other experience. The oldest feeling experiences of our ancestry are connected with the hearts of our bodies.

When we come to the development of the senses, we find that they all evolved from touch. Smell and taste were the first to emerge. Smell it was that led to the evolution of the brain, and it has been often remarked that smell has peculiar power in recalling associations.

Sight began with the perception of *movement*. The first discrimination in vision was probably between warm colour and cold colour—roughly, yellow and blue. The next, probably, was that of the warm colour into red and green. These four are the "primary" colours. Red-green colour-blindness is comparatively common, but blue-yellow colour-blindness is extremely rare—which would argue that the latter was the earlier discrimination.

It would seem that the movements of fish are instigated and guided by separate working of the senses, not by co-ordination of

[1] See MacBride, *The Idea of Memory in Biology*, p. 8.

[2] Thomson, J. Arthur, *The Study of Animal Life*, p. 182, quoted by Coe, *Nature versus Natural Selection*, p. 576.

them, although the fish concerned can smell, taste, see, and even hear.[1]

Some of the fishes of the time when the Devonian rocks came into existence took to breathing air in part, and they had also evolved the general groundwork of the vertebrate skull, including every one of the twenty-eight bones in it that man retains.

One of the most important powers developed in the evolution of the mind was the power of recalling past sensations. The first sense to attain cerebral re-representation was smell. Smell was for long predominant. Touch, vision, and hearing were merely auxiliary.

It was the "reptile" forbears of the frogs that first among the higher animals learnt to breathe free air, that first developed what was to be the five-fingered hand, that first produced a voice.

Greater bodily activity was developed, carrying the body clear of the ground. Greater heat was produced. The earliest mammals were small creatures: their increased production of heat was therefore accompanied by a relatively large loss of heat, because, it will be remembered, the smaller the body the larger in proportion is the surface. Hence, to prevent this excessive loss of heat, hair was evolved.[2] The Eocene Ice Age, says Coleman, was fatal to the gigantic reptiles such as the dinosaurs, and left the world free for the dominion of the vertebrates whose warm blood and fur or feathers enabled them to triumph over the cold-blooded bareskin reptiles.

Our ancestral reptile became a mammal. By that time it had warm blood, a hairy body, and a muscular diaphragm between lungs and liver. Reptiles had developed the habit of living on dry land. An Amphibian pointed the way in the Upper Carboniferous Age. It retained enough of its older habit to return to water to deposit eggs. The young developed in the water. To that amphibian ancestor we are indebted for fingers and toes, true lungs, a wagging tongue, and vocal cords.

An important factor in the evolution of man was the development of the care of offspring. The higher evolved animals have great recapitulations to go through,[3] and care of offspring is necessary while all but the latest stages of the recapitulation are in progress. In the earliest stages of recapitulation the offspring is carried in the body of the mother. But, provided the offspring is safeguarded,

[1] The last three paragraphs are based on Ward, *Psychological Principles*.

[2] As mammals grew larger they could afford to shed their hair, since their surfaces were relatively less in extent in proportion to their bulk.

[3] There is an evident relation between length of period of growth and length of life. The cat grows for 1½ years, and lives 8; the dog 2½, and lives 12 or 14; the horse 5, and lives 25 to 30; the camel 8, and lives 40. All the larger animals live about five times their growing period. (Dorsey.)

the sooner the offspring can be born the better, in primitive conditions of life especially. There are obvious reasons why birth takes place before the offspring is able to look after itself. Nourishment is provided in transitional form; recapitulation permits of new habits being grafted; in the case of the mammal, milk is pumped into the offspring before the latter has learnt to suck.

An important development that emerged was the continued association of offspring after birth with parent. Thus arose the possibility of education.

It is significant in this connexion that in the mammals a development in the brain, in the pallium, arises somewhat suddenly to importance. At this stage greater responsibility is thrown on the brain to cope with the increased development of intelligence.

It is the surface of the body that is in contact with the external world, and therefore the being is dependent on the surface of its body as means of communicating information about the external world. Thus, firstly, within limits, *extent* of surface is important. But here again the law of the relation between extent of surface and bulk comes in: as a body increases in size its growth of surface does not keep proportionate to its growth in volume. With rapidly increasing bulk there is only slowly increasing surface area and only slowly increasing brain stem with pallium. Therefore it does not pay to become gigantic. Secondly, however, *quality* of surface for communicating information about the external world is important And thirdly, of course, the intelligence with which it is used.

In becoming acquainted with the external world limbs are important. Limbs afford not only the positional signs of passive touch, but also positional signs obtained by movement. Hence the most mobile parts of the body have the keenest "spatial sense" and the least mobile the bluntest.

The power of recalling and co-ordinating sense impressions was developed; the organ developed for this purpose was the neopallium. The neopallium is a part of the cerebral cortex; as already indicated, it attains an important functional significance only in mammals. Sensations of sight, hearing, and touch are co-ordinated here, as a result of which we are able to appreciate the various properties of the object which appeals to more than one of these senses; here are compared our present impressions with similar or contrasted impressions from the past.

When our ancestors took to tree-life, scent was gradually diminished; in pallial re-representation it was gradually crowded out.[1] As the snout was gradually used less for smelling and grasping, and sight was used more for becoming acquainted with environment,

[1] Can you remember the scent of violets in the entire absence of any actual scent? Can you dream a scent?

gradually there developed recession of the snout and procession of the eyes. Through grasping, touch was developed. It is important to remember, in this connexion, that by touching an object, the animal may not only learn about the object, but in the contact may also learn about itself. In grasping, an enormously important development was that of the opposable thumb.

There developed the hand. Because of its specialization as the organ of touch, the hand is the final arbiter of comparative magnitude. In vision the apparent size of an object is relative to its distance from the eye. The eye really sees things in the flat; it is the motion and the hand that determine size and solidity.

As the hand supplanted the mouth as a prehensile organ, the snout receded and the head became poised more directly above the neck, and thus became more easy to turn. Arboreal life, with the use of the hands as prehensile organs, calls for exact perspective or plastic vision: hence procession and conversion of the eyes. Vision evolved from the periscopic or panoramic vision of the defenceless herbivora, like the hare or the rabbit, whose food is stationary, and most of which herbivora need to beware of enemies on the horizon; through the binocular vision of the carnivora, which need accurate vision at close quarters to adjust their movements instantaneously to those of their prey in front of them; to the stereoscopic vision of the Primates, whose arboreal habits and use of the hands as prehensile organs develop this.[1]

Another of the important changes induced by tree-life was in respect of reproduction. The primitive mammalian stock was very fecund, but a large litter or a long pregnancy is incompatible with arboreal activity. Hence ensued reduction of the family and the tendency to produce very immature and dependent offspring.[2]

The Primates were at first a small and humble folk who led a quiet, unobtrusive and safe life among the branches of the trees, taking small part in the fierce competition for size and supremacy that was being waged upon the earth by their carnivorous, ungulate, and other brethren. But all the time they were cultivating the equable development of all their senses and limbs, and the special development of the more intellectually useful faculties of the mind that in the long run were to make them the progenitors of the dominant mammal. It is the wider triumph of the individual who specializes late, after benefiting by many-sided experience in early life, over him who in youth becomes tied to too narrow a calling. It is one of the greatest assets of our stock that no one element was

[1] Ward, *Psychological Principles*.

[2] The offspring clings to the mother.

selected for undue specialization: the changes in hand and eye and brain were co-ordinated into a harmonious growth.[1]

An important element, as we have seen, in the success of the Primates was the development of the hands as means of getting to know the external world, and they also enable the animal to get to know its own body as in the external world. They may feel, examine, and test practically every part of the surface of the body, and the animal can now treat its own body as a novel object and learn about it. The eyes may also examine almost all the body, and the animal then has a picture of its own exterior. This is important in the development of "self"-consciousness.

Only pictured movements are represented through the cortex of the brain. In the central furrow of the brain, in the pre-central cortex, are the centres of motor control, and it is significant that the centre for the control of the muzzle is followed by that of the thumb. What the sensory or post-central area of the cerebral cortex is concerned with is the awareness of the parts of our bodies as projected in space. Movements, not muscles, are represented through the cortex. What the being's hands feel, its eyes can picture. The cortex becomes a storehouse of pictured movements. The rôle of the higher centres appears to be that of inhibition. What the cortex controls is the voluntary muscles. It is a common experience that in learning to swim, for example, the tiro one day realizes that the thing is possible, and having attained the cortical knowledge that he is able to swim, he will never again be unable to swim. The cerebral significance of this is that the action has achieved cortical control.

"From calling up pictures of past associations of pictured movements there is perhaps a step towards constructing conceptions of future movements evoked by hypothetical circumstances."[2] An animal without what is called "neopallial kinæsthetic area" has only internal consciousness. An animal with a kinæsthetic area has pictured consciousness. An animal with a developing pre-frontal association area has in addition the faculty of building up pictures of possible future actions. Here we have three stages of what are commonly called consciousness, conscience, and ideals of conduct.[3]

The passing from "internal consciousness" to "pictured consciousness" is one of the most important stages in evolution. Consciousness of external things as such is developed. The being emerges in consciousness from preoccupation with the body sensed internally, as

[1] Elliot Smith, *The Evolution of Man*, pp. 25–6; Wood Jones, *The Matrix of the Mind*, pp. 146–7. This paragraph, quoted from them, seems to me to contain one of the greatest lessons of history. The power of adapting oneself, of initiative, and of overcoming difficulties is in the long run to be conserved even at the sacrifice of the most successful specialized adaptation to present conditions.

[2] Wood Jones, *Arboreal Man.*

[3] *Ibid.*, p. 192 sqq.

it were. It begins to work in the external world and to leave off the development of new organs. Historically the transition was characterized outwardly by the use of tools. The beginning of the use of tools is found in simians.

The simian or monkey psychology lies at the base of post-natal human life—curiosity, imitation, high emotionalism. With regard to the last-mentioned point, the feeling displayed by monkeys for others of their kind in pain is of the most affecting nature. They also reveal vanity in high degree and corresponding sensitiveness to ridicule. Cases are recorded of monkeys which mocking laughter or even a single sharp word or glance has driven frantic.

Monkey types also develop social characters of other kinds. Social types of animals belong to the last geological period. This stage in our ancestry may be represented by such animals contemporary with ourselves as baboons. Baboons live in enormous herds, which at night-time sleep huddled together for warmth. There is conflicting evidence on the following point, but it is alleged that they post sentinels. If they are attacked, the whole band sets up a furious roaring, screaming, and howling; the most powerful males throw themselves upon the enemy with terrible rage; they protect the weak and young, and fight valiantly to save them from the aggressors; they bring the wounded into safety and set a rearguard for the old as they retreat. They help, defend, and avenge any member of the troop who is wounded, and rely on each other's assistance.

Baboons are capable of building a shelter of branches. Both the gorilla and the orang-utan can throw stones very straight and roll rocks down a hillside. Apes walk with the help of sticks, and fling stones, boughs, and prickly fruits at the heads of their enemies. With stones, too, they can break nuts. The chimpanzee builds a little hut out of tree-trunks, which is very similar to that of savage man.

Apes eat not only fruit and nuts, but also eggs and small animals. The taking of animals requires alertness. Some apes hunt even antelope and large bush-buck. So in hunting, our ancestors learnt from their contests with larger animals: hunting and defence led to concerted action. Among apes discipline is maintained by the oldest males in the troop. Language gets at least as far as distinctive sounds, cries of warning, appeals for affection, demands for help, calls for and announcements of food, threats, and other indications of passion, fear, and feeling.

It is said that a gorilla practises a rude sort of music by beating trees with a stick, in addition to striking his chest for the sake of hearing the resounding noise. It is credibly attested that a dead ape is dropped into a hole in the ground, if one can be found, but in any case a great heap of sticks and branches is piled on the body.

Many kinds of apes at the present time, when they descend from the trees to hunt, habitually walk on their hind legs, leaving their hands free.

It was probably in the Miocene that the ancestors common to Man, Gorilla, and Chimpanzee became separated into groups. It is known that by the time our ancestor was on the way to become a gibbon or a man he had definitely parted with an external tail and had begun to acquire such differentiation of the muscles of face, mouth, and throat that he could put "expression" in his face and character in his voice.[1]

This ancestor of man left the trees and took to the open country. The exposed life developed intelligence further, and sight was developed by distance. This new life also developed what is the distinguishing physical feature of man—the feet. But the planting of the feet flatly on the ground was only gradually acquired. "It is the arboreal footpoise which leads children to make holes in the outer sides of the soles of their shoes."[2] "The newborn baby has comparatively powerful arms, so that when it grasps a stick it can support its own weight; but it has feeble, short, crooked legs, and so it strongly resembles in its proportions one of the anthropoid apes, which may be regarded as the immediate ancestors of the human race, and this resemblance still persists in the little toddler who has learnt to walk. With curved thighs, weak ankles, and soles that tend to turn inward, the little one resembles in its gait the gibbon."[3] The specialization of the legs and feet, as it proceeded, made possible the further specialization of the hands, ridding them of the task of assisting locomotion.

The gorillas that are the nearest relatives of the human race are harmless and peaceable, living chiefly on bamboo roots and leaves. Possibly, when they have the opportunity, they may take eggs, grubs, or even young birds, but they are vegetarian as a rule. They spend most of their time on the ground, although they climb trees in search of food and to make their nests or beds. They live the kind of life that was probably that of the earliest human beings, before the invention of weapons or the use of fire or even of fixed abodes, for the nests are made one day to be abandoned the next. An important character of our ancestors who became men was the social nature of their life. In this connexion it has been remarked by Morris, in *Man and his Ancestor*, that all the strikingly intelligent creatures are strongly social in their habits, and no decided display of intelligence is to be found among species whose individuals lead a solitary life. "As iron sharpeneth iron, so a man sharpeneth the

[1] Dorsey, *The Nature of Man*, p. 34.
[2] Wood Jones, *Arboreal Man*, p. 205.
[3] MacBride, *The Idea of Memory in Biology*, p. 15.

countenance of his friend." On the other hand, communism has not been biologically successful. One characteristic of communal creatures is that they become mentally specialized. They round up their powers, build barriers of habit, over which they cannot pass, perform the same acts with such interminable iteration that what began as intellect sinks into instinct.[1] The non-communal but social creatures, on the contrary, retain versatility. There is some measure of work for the group, some mutual aid, some evidence of leadership and subordination, but these are confined to a few exigencies of life, while in most of the details of existence each member of the group acts for itself.

[1] The insects—ants certainly, and probably bees and termites—had developed their extraordinarily complex social life, with its precise division of labour among specially adapted classes of the community, many millions of years before man appeared on the earth. Some insects make, and apparently communicate habitually by, sounds far outside the range of our hearing. Some moths seem to excel in acuteness of smell the hound as much as the hound excels us. Insects must at one period have come near to being the dominant form of life on the globe, and many believe that, if for any reason the human race should dwindle, it would dominate again. Nothing in nature is more terrible than the advance of an army of one of the more savage tribes of what are called Visiting Ants—"miniature wild beasts of incredible voracity and fierceness"—in the path of which no other creature, great or small, can stay and live. By what slow processes, through what indeterminable ages their elaborate social systems were developed and the different classes came to be so highly specialized each for its appropriate work—how they acquired their knowledge of the various industries (dairying, fungus-growing, and the rest) which they practise, or, still more, arrived at the perfection of unanimous action without any word of command or imposed authority (the very ideal of a free democracy), together with complete laboriousness and self-devotion, so that every member of a nest or hive gives its life instantly for the common good—how did all these things come to be? All we can say with certainty is that these creatures, millions of years in advance of man's coming into being, attained a perfection of social organization which in many ways man has not yet approached; and that, having attained it, they have stood absolutely still, incapable, apparently, of any further progress, since, let us say, some time in the Oligocene. It has been observed that this has been the fate not only of one species of ant or bee or wasp or termite, but essentially the same course has been followed by a dozen or more quite different groups of insects. All ants seem to have been originally carnivorous or entomophagus. Some still are; but the transition of many species, in the course of their social development, to a milk and vegetable diet, involving the keeping of aphides and fungus-culture, has a curious similarity to the progression of man from a hunting to a pastoral and agricultural life. Forel quotes Espinas to the effect that ants set us the first example of property-owning, in land as in herds and gardens. (This footnote was put together from a review in *The Times Literary Supplement*.)

Here again we see the vastly important lesson we read above—that the power of adapting oneself, of initiative and of overcoming difficulties, is in the long run to be conserved even at the cost of the most successful adaptation to present circumstances.

In the case of the solitary forms such new conceptions die with the individual. Though they may exert influence on the development of the nervous system, and aid in the transmission of more active brain powers, they are lost as special ideas, fail to be taken up and repeated by other members of the same species. This is not the case with social animals. Each of them has some faculty of observation and some tendency to imitation, and useful steps of advance are likely to be observed and retained as general habits of the community. New ideas are of rare occurrence: they generally come from the few to the many.[1]

Concerted action among the sub-human ancestors of man developed means of communication. The "speech" of the lower animals is a vowel form of speech. A cry of warning may be so modulated as to indicate to the hearer, "Beware, an enemy is coming!" or something such. Accent or tone is all-important. This level of speech lacks the consonantal element, the characteristic of articulation.

Gesture is anterior to articulated speech. Indeed, true speech originally was and fundamentally is produced by gesture in the mouth, seeking to act that which it is desired to communicate, and breath being emitted at the same time, so that the sound is characterized by the gesture.[2] Emotions produce "natural" muscular effects, including those affecting the mouth and the throat, and the emission of breath communicates them.

Even in the primitive and aberrant *Pithecanthropus* there was already a noteworthy and highly significant overgrowth of the area of the cerebral cortex corresponding to that of the human brain, interference with which leads to a disturbance or a loss of power to understand the meaning of spoken language.[3]

The significance of speech is that it provides symbols that are intimate and easily usable, and not only as means of communication between the members of one generation, but also for handing on such accumulated experience as may be. Then there is added the outcome of the attempts to explain and interpret such experience.

This new medium of the development of intelligence led to the increased development of "association areas" between the areas of specialized functions in the brain which characterizes the final stage of brain development, which distinguishes man from the lower animals.

Cerebral activity, as it develops, engrosses attention and much of the energy available for the total vital activity.[4]

[1] For the last two paragraphs, Morris, *Man and his Ancestor*, p. 79 sqq.

[2] Sir Richard Paget, Bart., *The Nature of Human Speech*, and, more recently, *Human Speech*.

[3] Elliot Smith, *Evolution of Man*, p. 64.

[4] Man is less able than lower animals to regrow damaged organs. Prolonged quiescence of cerebral activity renders possible healing and repairing of

So far as his instincts and emotions are concerned, there is little essential difference between man and the apes. But in virtue of his enormously heightened powers of discrimination and his ability to profit by experience, man has learnt to *control* his instincts and emotions to a greater degree, in the sense of having them in conscious control.

A Cross-section of Life at the Human Level

On the memory theory of heredity consciousness and memory extend to the most primitive forms of life whatever they may be, and the consciousness of man is an inherited fusion of the consciousnesses of his ancestry right back.

In a real sense we are made up of cells, and the deep-seated consciousnesses of the ancestry of cells matter deeply to us.

It is evident that life is motivated by the deep-seated instinct which prompts to maintain the self and to enlarge it. In this process, as we have seen, assimilation is necessary. Now Butler it is who appears to have recognized first the central importance of what I venture to call the Law of Assimilation or the Law of Familiarity and Unfamiliarity: it runs throughout life: *To be assimilated heartily a thing must be neither too familiar nor too unfamiliar to the assimilator.*

It appears that the self instinct asserts itself, to a great extent, blindly. It takes on successive forms, and these interpenetrate all those that succeed them.

The primitive hunger is for sustenance. Assimilation by protoplasmic cell is fundamental physically.

The splitting of a cell into two or more cells is the foundation of the generations. The new cells are the young; they are youth; they have the respite, in which to acquire, until they grow to the maximum size at which the crisis described above arises.

When two young cells unite they commingle different and yet similar experiences: they assimilate each other mentally and physically. This is the foundation of sex union. The mixture of protoplasmic strains confers advantage—on the principle that two strains with their accumulated experience are better than one.

organs, that may not take place if the being continues "at work." It is not absurd to suppose that by hypnosis remarkable extension of this healing and repairing power may take place. Both in hypnosis and somnambulism the subconscious mind acts with remarkable precision, which may be interpreted by the theory that all the vital forces being grouped round a single idea without consideration or distraction gives a great power and sureness of action. This is what strikes us as "inhuman" in animals, and, in the hypnotic somnambulistic state referred to, there appears to be a curious regression to animality: the subconscious, deprived of conscious direction, seems to recover for the time the sureness characteristic of "animal instinct." (Geley, *From the Unconscious to the Conscious*, pp. 70, 223, 255.)

The union of cells makes the crisis which brings about splitting, described above, come with correspondingly hastened incidence.

One type of cell tends more to, and develops the habit of, going out for the satisfaction of union, whilst another type tends more to wait for, to attract the other cell for this satisfaction. This is the foundation of the sexes. Sex-craving comes to be one of the strongest drives towards action, taking second place only to hunger, fear, and pain, which are fundamental to the self-preservative tendency.

In the organism of cells, specialization of function is controlled by the central power in the organism. For the purpose of union, "simple" cells are retained in simple form, but imbued with the differentiated functions of the whole organism of cells—the epitomized memory of their ancestry, indeed.

Above the lowest *metazoa* (*i.e.* multicellular organisms) beings are visibly differentiated in sex. It seems that in an individual one sex may be dominant and the other recessive in an infinity of proportions.

The origin of the separation between plant and animal may be found, as Butler suggested, in the specialization of organisms that go after food as against those waiting for food to come to them.

In the evolution of the animal body, organs not only performed their original or acquired functions, but could also be the correlates of other experience. The oldest feeling experiences of our ancestry are connected with the hearts of our bodies.

In the operation of the sex instinct there is an element of knowing. Here, again, for the experience to be vigorous, the object must be neither too familiar nor too unfamiliar. Sex interest is very much a matter of the unfamiliar, which may be dulled through familiarity. So also in the other instincts there is a strong element of desire for that which is neither too familiar nor too unfamiliar.

The skeletons of men surviving from prehistoric times are not very easily distinguished from the skeletons of women that survive, whereas in the case of modern man the distinction is obvious. This is probably connected with that turning-point in the history of human sex that is marked by the development of the home with woman as the homekeeper. Consistent with the distinction between the sexes of the male going out to seek while the female waits to receive, so the male went out to get food while the female kept home

Man is thus largely motivated by "instincts," which, on the Butlerian theory, are embodied in inherited habits, proclivities, dispositions, memories. Among the chief that may be designated are the instincts to self-preservation; food; sex; possession; power; and the herd instinct.

From the Human Stage

Sir James Jeans, in *The Universe Around Us*, has given his estimates that life has been on the earth for three hundred million years,

and man for three hundred thousand. As this would lead us to expect, and for reasons already indicated, in the inheritance of mind it is the mental phenomena *associated with the adaptation of the body*, whose inheritance is most secure and unconscious. Man, as he became less dependent on hand-to-mouth methods of living, had removed from him the immediate stimuli of physical pain. Any progress he made, therefore, was dependent less on these and more on his own initiative. Tools make possible the socialization of the means of production, distribution, and exchange. An inferior man with a superior tool can, *ad hoc*, keep off certain physical pains. But if man relieves himself from applying himself, he does not progress, and may deteriorate. Ideas that count arise in the very exceptional individual.

But modern man inherits deep-seated habits acquired since man became man. To primitive man the unfamiliar and unexplained was supernatural. Before it his mind bowed in awe and deprecation. He projected himself into the "spirits" of the things that encompassed him. He believed that certain things were forbidden by the supernatural. Things were spirits with characters suggested to primitive man by the impressions made on him by their forms and apparent actions. Such were animals. In his experience he was naturally deeply actuated by his instinctive hungers, such as for food and sex experiences. Hence his cultus of fertility and his use of sex symbols. The mother knew how to produce life. Water brought fertility. In time of drought a person exceptionally sensitive to coming rain might express desire for rain and the rain might follow. Thus emerged the wizard. He became a person of great power, impressing the mind of the tribe most deeply. Fertility, the success of the tribe, rested on him. Here is the divinity that doth hedge a king. He is the prototype of king, priest, doctor, professor, lawyer, judge. When he dies, he enters into greater power.

Arising out of these ideas came the belief in magic. Magic was based on the instincts for repetition, rhythm, hypnotism, illusion, suggestion. They were all connected with emotion that called forth great excitement and suggestibility: hence fetishism, the magic use of words and language, poetry, sacred writings.

Race appears to be due to the habits ingrained, physical and mental, among people who have been segregated (as against intermarriage) for a long period. Such habits, once ingrained, are, by the same token, very persistent. The longer a group of people remain politically united, the closer does the "physiological unit" become, and the more quickly and thoroughly, within the stipulated limits, does it assimilate alien elements. The narrower the territory, so does relationship mount to the hundredfold and thousandfold.

Crossing appears to follow the Law of Familiarity and Unfamiliarity, not only in living things in general, but in man. Mating that

is neither of the two similar (inbreeding) nor of the too dissimilar is good, but if the cross is too violent or of the too similar, harm or sterility results.

Adversity that is responded to by superior application produces character. "Family," in the sense of a number of successive generations of persons who have lived well, "counts."

Sex inheritance is not exclusively of one sex or the other, but one sex is dominant and the other is recessive. Sex instinct was modified importantly by the establishment of the home with woman as homekeeper. One consequence of this was that the male, going abroad, was stimulated more by greater variety of females; on the other hand, woman was by her domestic duties kept closer to some of the realities of life. Woman is more primitive, childlike, conservative, superstitious, conventional. Man is more venturesome, unconventional—for evil and for good; there is more crime, for example, among men, but, on the other hand, there are more geniuses.

The sex instinct is so strong that it creates illusion. Sex passion is more widely distributed in the lives of men, but is in women, on their occasions, stronger. Large and central tracts of "art" are occupied with "love," although its real place in life is other. Much of what appeals to a man as beauty in woman is not beauty as such, but marked feminine characters that appeal to him as a male. When a woman thinks of her lover it is as the father of her children. In the sub-human world of life it is the male that specializes in ornament; in the human world it is the female who does so: she has passionate interest in dress and decoration.

But although one sex may be dominant physically, the mental characters of the other sex may be dominant or recessive in varying degrees.

Ideas that count arise in the very exceptional individual. Some years ago a President of the British Association said:—

> "Annul the work of a few hundreds—I might almost say scores—of men, and on what plane of civilization should we be? We should not have advanced beyond the mediæval stage, without printing, chemistry, steam, electricity, or surgery, worthy the name. . . . To improve by subordinate invention, to discover details missed, even to apply knowledge never before applied, all these things need genius in some degree, and are far beyond the powers of the average man of our race; but the true pioneer, the man whose penetration creates a new world, as did that of Newton or Pasteur, is inconceivably rare. But for a few thousands of such men, we should perhaps be in the Palæolithic era, knowing neither metals, writing, arithmetic, weaving, nor pottery."[1]

[1] Quoted by Spurrell, *Modern Man and his Forerunners*, p. 149.

True as this is, how true is it also of profound truth, goodness, beauty?

The generations of the past are closer to us than we commonly think. 2^n is the total number of anyone's ancestors for a given number of generations. Every man alive to-day had about the year 1000 a milliard ancestors. "Reckoning back to the Norman Conquest," it has been said, "I find myself provided with 67,108,864 great-great-great-

and yet unified experiences of the ancestry; especially potent, of course, are the vastly repeated ones, the ancestral habits, in proportion to their repetition.

But inheritance is not only within the mind. During the history of mankind there has grown up a cloud of traditions and beliefs, to the influence of which every human being is exposed from the day of his birth and throughout his life. It is this almost wholly artificial intellectual and moral atmosphere which colours his outlook on life and provides him with the ready-made apparatus for interpreting his own real experience. The range of true judgment is, in fact, extremely limited in the vast majority of human beings. Instincts, emotions, the unconscious influence of the environment in which an individual has grown up—these play an enormous part in all his decisions, even though he may give a rational explanation of the motives for many of his actions without realizing that they were inspired by causes utterly alien to those which he has given—and given without any intention of dishonesty—in explanation of them.[1]

The symbolisms which man has evolved are most inadequate. "Language," for example, as R. L. Stevenson said, "is but a poor bull's-eye lantern wherewith to show off the vast cathedral of the world." This is true, although every word we speak and, in even greater degree, every sentence involves a complex symbolism and various shades of meaning determined by the emotions and personal experience of the speaker. Language is, of course, only one example of symbolism, which, again, is a form of convention. The herd instinct operates with enormous power. The inertia of tradition or public opinion, and the lack of courage to defy them when evidence fails to conform to them, seem to be potent to blind all but the ablest and most fearless of men to the most patent facts. Courage of the kind indicated is the rarest of human virtues.[2]

NOTE.—The writer wishes to acknowledge a special debt to Wood Jones, *Arboreal Man*, which he has been unable to indicate in the text.

[1] Elliot Smith, *Evolution of Man*, p. 65. [2] Elliot Smith, *Human History*.

PHILOSOPHICAL SURVEY

PHILOSOPHY IN FRANCE

COURNOT AND RENOUVIER

THERE are, I imagine, five considerations that will serve as a *point d'appui* to the future historian of our century's philosophy, aiding him to interpret with fair adequacy the working faith and working postulates of one large and influential group of present thinkers. The members of this group, he will point out, however much they differ in other respects, accept in common and act upon this five-fold assumption, namely, that progress in philosophy depends upon (i) it abandoning its traditional claim to being systematic and final, in favour of "more modest" attempts at the piecemeal solution of particular problems; (ii) these piecemeal attempts being conceived as essentially co-operative undertakings, calling for assistance from men of science no less than from philosophers, so that (iii) the character of philosophical research is broadly not very dissimilar to that of scientific research; that this, in turn, necessitates (iv) an abandonment of the claim to, and the search for, "necessary" and certain knowledge, and an acceptance of knowledge that is probable as rationally sufficing; from all of which it follows, lastly, as something very like a corollary, that (v) philosophers can deal profitably only with "hypothetical questions," seeking to discover, from certain things provisionally taken as true, what other things may or must also be true. It is by these methodological convictions, by some declared, by others not, that much of the best work in Britain and America during this first third of our century has been inspired. And it is in harmony with the first four of them that the finest work in France on the "philosophy of the sciences" has been conducted throughout a period twice as long. Those methodological ideas are too often regarded in this country as being wholly original and brand-new innovations on the part of a certain few British philosophers still living. But I surmise future historians will show with little difficulty that this imputation is excessive, and will make due correction when the story of this contemporary movement is read as an episode in the account of interaction between science and philosophy during the last hundred years. For the first four of those five proposals were advanced and illustrated very effectively some seventy years ago in the works of that exceedingly 'modern' mind, Antoine Augustin Cournot. His natural proclivities, training and philosophical conclusions, his insistence on the intimate connexion between the sciences and philosophy, explain indeed precisely why his work encountered almost complete indifference during his own times (when the somewhat inflated 'eclecticism' of the Cousin school was flourishing) and why it should claim the sympathetic interest of present philosophers, who will at the outset be attracted rather than discouraged by his programme and the scheme of 'philosophic reform' it introduces. In the first half of the nineteenth century Cournot was esteemed almost wholly for the manner in which he discharged his official function of Inspecteur-Générale de l'Instruction Publique. Mathematics were his preferred studies in early life. They led him to the doctorate in science and to his first publications on the theory

of functions and the calculus and on the theory of probabilities, the last of which Czuber ranks with the classic works of Laplace and Bernoulli. His later renown, however, derives entirely from three somewhat massive philosophical works of unusual brilliance, the *Essai sur les fondements de nos connaissances et sur les caractères de la critique philosophique* (1847; republished 1912), the *Traité de l'Enchaînement des idées fondamentales dans les sciences et dans l'histoire* (1861; republished 1922), and *Matérialisme, Vitalisme, Rationalisme* (Paris: 1875), in which the whole is resumed. Though, as M. Lévy-Bruhl tells us, Cournot's fortune was a peculiar one, for his works, like Hume's, "fell still-born from the press," time has redressed the indifference. Negatively, they were a bulwark against the excesses of Comtist empiricism; positively, they have furnished the orientation for much of even most recent epistemology, as well as suggestive discussions of many frontier issues in science and philosophy.

That the present worth of Cournot's writings is in the main unimpaired and his lessons as yet but incompletely assimilated is plainly the inference to be drawn from the delightful volume of studies[1] by that careful and erudite scholar, the late Gaston Milhaud of the Sorbonne, who was, like his subject, mathematician turned philosopher, and a mind, one suspects, singularly like Cournot's. His six chapters deal with the development of Cournot's thought, his doctrines of Reason, of Chance and its relation to the Aristotelian conception, his final views on Science and Religion, and his attitude *vis-à-vis* "contemporary scientific pragmatism." Some of these topics are also treated in a further volume by M. F. Mentré,[2] who has chosen to handle his material in a much freer manner than M. Milhaud. Cournot's writings are not prolix like Comte's, but so compact, that Renouvier declared that two volumes would be necessary to give anything like a fair account of them. So, not to attempt the impossible, I shall confine myself to a few observations on several salient matters discussed by Milhaud and Mentré that are likely to be of current interest.

Cournot's *Essay*, his principal work, insists from beginning to end on the intimacy of the connexion between the sciences and philosophy. The last is understood as a criticism of the general results reached in the particular sciences, therefore as essentially epistemological. To assess the worth of accepted knowledge and define the limits of our cognitive competence is possible only by examining the most general interpretative concepts that humanity has actually used and developed in the history of its sciences. Cournot's analysis is directed, not to establishing a set of fundamental categories, but to eliciting, from scientific knowledge acquired, the most general principles ingredient in it, which are to be accepted as ultimately valid and already guaranteed by their pragmatic success, and therefore open, not to rejection on any metaphysical ground, but only to clearer formulation and correlation. Science thus inevitably leads to philosophy, for every science contains "a positive part" (susceptible of direct verification by empirical facts that are subject to experimental control) and a part that is "theory," in which facts are apprehended in relation to certain principles that are interpretative of them. To disengage, formulate and render harmonious such conceptions, principles or bodies of "theory" is essentially a rational occupation, and the proper business of philosophy. Now such *idées fondamentales* as those of number, force, matter, life, etc., are very variously analysed by

[1] G. Milhaud, *Etudes sur Cournot*. Bibliothèque d'Histoire de la Philosophie. 1927. Paris: Vrin. Pp. 151. 15 fr.

[2] F. Mentré, *Pour qu'on lise Cournot*. Bibliothèque des Archives de Philosophie. 1927. Paris: Beauchesne. Pp. 244. 20 fr.

different thinkers, but this diversity in no way affects the laws established through employing those ideas in the sciences. "The intimate union and yet primitive independence of the philosophical element and of the positive or properly scientific element in the system of human knowledge shows up clearly in mathematics in the remarkable fact that while the mind cannot proceed with regularity in scientific construction without adopting one or another philosophical theory, nevertheless the progress and certainty of the science does not at all depend on the solution given to the philosophical question." Philosophy, then, is concerned with the sciences at two junctures: initially, to criticize their primitive working conceptions and postulates; later, to comprehend and correlate their eventual findings, and to treat any problem they may have raised by the way and abandoned because its resolution does not fall within their purview. These diverse though complementary efforts have a common inspiration in motives radically philosophical. And the problems science 'raises,' but leaves to philosophy for settlement, should be treated by methods as similar as possible to those used in science, so that as high a degree of probability may be secured for their solutions. Philosophical criticism so conceived becomes what M. Mentré calls a "*probabilisme rationnel*," which, when certainty is unattainable, is content with approximations and probable results. "We must be satisfied," he says, "with high probabilities in the conclusions of philosophical problems, just as we are satisfied with them in the results reached in physics, history and daily life." So, in his penultimate chapter, when he examines the systems of Plato, Descartes, Leibniz and Kant in relation to his own *probabilisme*, all are censured for aspiring to demonstrative certainty where, from the nature of the case, only "philosophic probability" is attainable.

Cournot distinguishes two sorts of probability, "mathematical" and "philosophical." The conditions under which knowledge of the former is possible are rigidly restricted, so the philosopher must usually have recourse to the latter. Both sorts of probability are intimately connected with 'chance,' and it is to Cournot's valuable analysis of this that one of the best chapters in each book, Milhaud's and Mentré's, is devoted. Chance does not deny causal connexion but emphatically presupposes it. Natural events are so connected as to form series, and these intersect one another. Some are series of events of which one conditions another, in other series the events are "independent" in that the character of none is causally conditioned by any other. Those situations we call "fortuitous happenings" or "chance effects" are brought about by the meeting or intersecting of two such independent linear series, in each of which all the events are causally connected. The "intersection" or "meeting" is accidental in the sense that there are given two happenings each of which is causally independent of the other, though causally connected with anterior members of its chain. Thus "chance occurrence" expresses, not our present ignorance of some causal nexus, but a non-causal situation objectively realized in nature. And the idea of chance is as necessary as that of cause for interpreting the behaviour of natural bodies: science is as powerless to extirpate the one as the other. "Our causal science might develop to such a point as to exhibit cosmic theory as nothing but a mathematical theorem without that development ridding it of the idea of fortuity and its rational consequences." Chance however is not restricted to the domain of natural occurrences: an analogous situation arises with "rational series" as with causal ones (*cf.* the "irregular series" of decimals generated in calculating the value of 'π'). The notion of 'independence,' however, so vital to the theory, Cournot defines only extensively, and it is one of M. Milhaud's many merits that he does much to clarify it,

distinguishing it from contingency and replacing it by "positive variability." "His conception of chance," writes M. Milhaud, "is never divorced in his thought from the idea of a variability which enables us to foresee a series, finite or infinite, of possible meetings, all of which are, at least *a priori* and subjectively, equally possible. . . ." This conception in fact forms the basis of the calculus of probabilities for both Cournot and Renouvier. The probabilities that attach to inferences by analogy and induction are totally different from mathematical probabilities. The former escape precise computation, yet they are accompanied by a conviction that precludes any reasonable doubt, and are based on rational preference for an alternative which seems best to satisfy conditions of simplicity, generality and system. The regulative idea by which rational interpretation proceeds is precisely the contradictory of chance, irregularity and disorder, and one which straightway rules out Kant's Copernican hypothesis, since "if there were no concordance between the order of perception (*de réception par nos facultés*) and an order in the objects so presented, there would be but an infinitely small probability that the two orders would so fit in as to produce a regular connexion in the order of representations." Thus, the purpose of Cournot's analysis of chance and irregularity is mainly negative, *viz.*, to throw into relief by contrast what is involved in the conception of an objective regularity, dependence or "rationality" *that is compatible with* an equally objective irregularity and independence among facts. The essential explicative conception is "order," but this Cournot unhappily never analyses in any detail. Like Renouvier, he holds that the *idées fondamentales* cannot be brought into any systematic unity, analogous to that of the Kantian categories. Analysis of our knowledge yields a certain number of heterogeneous and "discontinuous" principles: there is no logical passage from our notions of time and space to those of force and matter, nor from the latter to those of life and organism, nor again from these to the idea of society. Lack of space forbids us to dwell longer on this notion of rational order, on the many contexts—in natural and biological science and history—in which its presence is disclosed, or to consider the interesting inferences Dr. Ruyer has recently drawn from them[1] concerning the political and religious future of humanity.

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Renouvier, a contemporary of Cournot, was the outstanding French representative of Neo-Kantianism, and though it is tolerably certain that some of his cardinal theses are untenable, there remains an impressive amount of his work on phenomenalism and the theory of personality which is of more than historical interest. Few nowadays are likely to encounter Renouvier's massive tomes, and that excellent philosophical publisher M. Vrin deserves thanks and congratulation for having issued two masterly critical expositions of Renouvier by MM. Milhaud and Hamelin. Milhaud's volume[2] is a series of lectures given at the University of Montpellier (the birthplace of Renouvier and of Comte), the latter[3] a more extensive and elaborate course delivered at the Sorbonne. As it is impossible to indicate in a brief notice the detail of these examinations and their many excellences, I shall limit myself to a few points which both authorities agree are central. Like Cournot, Renouvier renounced the hope of working out an adequate synthetic view of the universe that is both systematic and final. Both recognize an element in all science

[1] R. Ruyer, *L'Humanité de l'Avenir d'après Cournot.* 1930. Paris: Félix Alcan. Pp. 150. 30 fr.

[2] G. Milhaud, *La Philosophie de Charles Renouvier.* 1927. Paris: Vrin. Pp. 161. 15 fr.

[3] O. Hamelin, *Le Système de Renouvier.* Publié par P. Mouy. 1927. Paris: Vrin. Pp. vi. + 454. 45 fr.

that is irreducible and rationally incalculable: Cournot called it "*hasard*," Renouvier "*liberté*." Both conceive epistemological criticism to be the proper business of philosophy, but, unlike Cournot, Renouvier takes this to involve the elaboration of a set of ultimate interpretative categories, and so begins by critically investigating Kant's. All experience is of, all knowledge about, what Renouvier calls representations or phenomena, and these are all complex, consisting of a representing factor (*répresentatif*) and a represented one (*répresenté*). A representation involves nothing that is not an element of itself, there is no order of things-in-themselves. As connected by certain regular and pervasive forms of order, representations are called phenomena: their order is expressed by their laws. The novelty of Renouvier's account of these types of order centres in five criticisms which lead him to revise the Kantian list of categories. Kant (i) should have made the category of relation central, for it is the key to all the others, (ii) he wrongly distinguished the forms of sense-perception from the categories, and (iii) should have replaced the distinction between sensibility, understanding and reason by a distinction between categories. He should have (iv) included a category of 'personality,' and (v) regarded 'finality' and 'becoming' as categories. Renouvier next turns to the 'functions' of representations, and in particular an analysis of human functions. The mechanical functions of the human body can be interpreted by the separate categories of number, position, succession and becoming, and its physico-chemical functions by the former categories plus quality. Biological functions presuppose all the previous categories and those of causality and finality besides, while consciousness (which appears with sensibility), though requiring as its precondition all prior types of organization, cannot be explained without remainder in terms of them. And the step from sensibility to understanding is not analogous to that from biological functions to sensibility, for the latter is representative and so far cognitive. So distinctions between the categories are correlated with distinctions between various functions or ways of behaviour in organisms, *e.g.*, to 'relation' corresponds the function of comparison found in animals and men, but accompanied by attention and reflexion among the latter; to 'position' corresponds imagination, and to 'succession,' memory, etc. To the six categories of relation, number, position, succession, quality and becoming, correspond the functions of understanding or intelligence, whilst to the remainder—causality, finality and personality—correspond the functions of emotion, feeling and will. Each of these categories, which Renouvier reaches by analysis of empirical fact and not by an *a priori* dialectic, comprehends three factors which stand to one another in the *relation* of thesis, antithesis and synthesis, so that really the notion of 'relation' is the most general, being presupposed in all, and so stands to each in a quite different connexion from that in which each stands to any other. Thus all our knowledge is 'relative'. What, it seems, we know are, strictly speaking, relationships, though these can be exhibited only in complexes, as ingredient in sensible or 'irrational' materials: hence the need of representations. There are no substances: a material object is no more than a group of representations connected by certain relations such as may be interpreted through the categories. The self is not a substance but a complex of related representations of a different kind. This relativist view of knowledge does not, according to Renouvier, involve a vicious regress, for factual termini to the possibility of infinite analysis are imposed by certain irreducible syntheses we encounter in the *répresenté*. Nor is the theory solipsistic, for our knowledge or science, though reached by particular persons reasoning each from his own representations, is nevertheless not *about* only those representations,

but about all of like kind, *i.e.*, representations in general. All that exist is composed of representations, and these of one common 'stuff.'

In conclusion, we may notice briefly two topics on which Renouvier thought he had made important and undeniable contributions: his famous "law of number" and his conception of liberty. The idea of an actual infinite or of a group or collection having an infinite number of elements is, he argued, self-contradictory. Empirical evidence warrants our affirming all collections to be finite. The notion of an infinite number (which he regards as the final term in the series of natural numbers) is contradictory because it would have to be greater than any given number. The assumption seems to be that *were* there such a number it could be "given." Hence the contradiction, for, being given, it would not be greater than itself. From this, which seems to be substantially his argument, it follows that the world is not infinite in space or time, therefore it must have had a beginning, and the series of natural occurrences also must have some definite number that is finite, even though we do not know what that number is. (Milhaud does not think Renouvier makes good his position here, and possibly his critic's suggestion as to how the "illusion" can be "dissipated" would hardly find favour among present philosophers who are mathematicians.) However, since, as Renouvier thinks, absolute beginning in time has been shown possible, and a preferable hypothesis to any other, the way is now clear to introduce the conception of human liberty. For what is this but the power to begin? Our liberty is our potentiality to initiate the succession of actions the end of which we will. All acts of freewill are uncaused acts through the occurrence of which absolute beginnings are realized:—"the fact of liberty consists precisely in this, that some order of events other than those which ensued was possible."

This extremely abbreviated summary of Renouvier's conclusions on Number and Liberty admittedly does him scant justice, though on these, his favourite doctrines, I fancy contemporary philosophers would consider him a precarious, or even fallacious, guide. This however would not destroy the value of the rest of his work, and the fact that so brilliant a thinker as Hamelin should, in large measure, have based his own system on Renouvier's, is sufficient to show that Renouvier built for longer than his own lifetime.

S. V. Keeling.

PHILOSOPHY IN GERMANY

Summary: *This survey deals with five books:* (*i*) Ethical Questions, *by Moritz Schlick;* (*ii*) Significance, Genuineness, and Love, *by Paul Feldkeller;* (*iii*) Neo-Kantian Tasks, *by Kurt Sternberg;* (*iv*) Kant's Ethics, *by Arthur Liebert; and* (*v*) Contemporary Philosophy of the History of Art, *by Walter Passarge.*

One welcomes a book on ethics from the Viennese school of scientific philosophy. Moritz Schlick, as was to be expected, regards ethics as a branch of psychology. But he claims that his book, *Ethical Questions*,[1] is philosophical as well. The statements which it makes are all psychological, but they are intended also to contribute to philosophy by increasing the reader's insight into the moral judgments of daily life.

The main business of ethics, according to Schlick, is to show why we perform moral actions—those actions which, in the view of the average man,

[1] *Fragen der Ethik.* Vienna: Julius Springer. 1930. Pp. vi + 152.

conduce to the happiness of society. Schlick's own view is that we always do what promises the most pleasure, and this applies to moral actions no less than to others. Moral actions give pleasure because they satisfy our social impulses. We often directly desire the welfare of other people, and so the procuring of their welfare gives us pleasure. (Schlick subscribes to the common view that the egoist—the man who is inconsiderate of others—is immoral, but he holds that such men are much less common than some moralists suppose, and that they are always abnormal in the sense that their social impulses are abnormally weak.) That actions prompted by the social impulses give us pleasure is important, because we tend to repeat only those actions which actually yield the pleasure they promise. Moral actions have a secure foundation, because the pleasure they promise is not illusory. Indeed, the satisfaction of our social impulses is the source of our greatest pleasure, for it increases our capacity for pleasure, whereas the satisfaction of 'lower' impulses undermines it. Schlick concludes that capacity for happiness (maximal pleasure) is the central ethical concept, and that this capacity is increased by moral actions. Experience shows that the virtuous—those who perform actions which, in the view of the average man, conduce to the happiness of Society, are usually happy. They are not, of course, always happy, because everyone's happiness largely depends on uncontrollable circumstances. But the virtuous man is always more prepared for happiness—his capacity for pleasure is greater—and so his chance of happiness is higher than that of other people. Schlick believes that the knowledge that the social impulses are the source of moral actions together with psychological knowledge of the ways in which social impulses can be strengthened should have practical consequences, enabling us to make evil men good.

Such, in bare outline, is Schlick's main argument. But four views which he incidentally develops deserve to be stated. (i) He believes that when we seek to discover in what goodness consists we must be rigidly empirical. We must first collect together those mental states and actions which are regarded as moral or good, and we must then discover their distinctive characteristics. For Schlick there is no antithesis between a norm and a fact. A norm *is* a fact, and an ethical norm is a fact about mental states or actions to the effect that only when they possess such-and-such characteristics are they regarded as moral or good. At the outset he admits that theoretically there may be no common characteristic which distinguishes all moral actions from others. But, as the result of his own empirical inquiry, he concludes that in fact there is at least one distinctive feature of all moral actions—they are all regarded by the average man as conducive to the happiness of society. (ii) Schlick holds that every value is relative to someone evaluating. Similarly, every demand is relative to someone who demands. In his view, Kant was right in believing that moral prescriptions are demands, but Kant's concept of an 'absolute demand' involves self-contradiction, if 'demand' be used in its ordinary sense. The ethical demand is relative to society. "You ought to do so-and-so" means "Society demands that you do so-and-so." He criticizes at some length the view that values are objective, and urges that it can provide no standard by which to test the truth of value-judgments. He distinguishes five different attempts to provide such a standard—among them the contention that ethical judgments have the same *a priori* necessity as logical or mathematical judgments. His answer to this contention rests on the view that logical and mathematical judgments, being tautologous, can have no affinity to ethical judgments. (iii) In Schlick's opinion, many moralists have a prejudice against pleasure. They exhibit an irrational distaste for the view that value depends on pleasure, and that we behave morally only because such behaviour is

pleasant. He thinks that their prejudice is mainly due to their education. Education aims at strengthening certain impulses and weakening others. It can do this either by making the idea of certain actions pleasant or by making the idea of certain other actions unpleasant. Actually it nearly always chooses the latter alternative. It nearly always restrains and forbids; it inflicts painful punishment for wrongdoing instead of conferring pleasant rewards for merit. Consequently, an association is established between moral precepts and the idea of displeasure or pain. And by a natural, though illogical, process the impression arises that if a thing is pleasant it is bad. The prejudice against pleasure is also due, Schlick believes, to the value which is attached to sorrow. Overlooking the distinction between sorrow and pain (the only antithesis of pleasure), people are misled into thinking that, since sorrow can be valuable, pleasure cannot be the only standard of value. For Schlick, sorrow is valuable because it contains pleasure. (iv) Schlick maintains that the 'problem' of free-will is not an ethical problem at all, and is only retained in ethics as a result of misunderstandings. All sciences, including ethics, presuppose the principle that every event is causally determined. Ethics is concerned, not with free-will, but with moral responsibility, and moral responsibility, so far from being incompatible with determinism, requires it. We are free in the sense that we can sometimes do what we choose—a sense of freedom which is quite consistent with determinism. We are not free in the sense that our desires and choices are undetermined, and, if we were, neither ethics nor moral responsibility could exist.

Paul Feldkeller's *Significance, Genuineness, and Love,*[1] though very different in both its views and its tone from Schlick's book, resembles it in maintaining a subjective theory of values. It is based on Paul Hofmann's analysis of significance, which, according to Feldkeller, provides the only remedy for the present spiritual crisis. In the past men fixed their hopes on another world and valued life in terms of some external standard. The modern man has no faith in any world but this. He believes that there are no gifts in store for him beyond those which are available here and now. This conviction needs a theoretical background—a theory of value which guarantees the significance of life. Theories and practices have developed which depreciate the individual. But only the individual has significance, and all values depend on the self. The modern man requires an analysis of this fundamental fact, and Hofmann has provided it.

Feldkeller agrees with Hofmann that value is felt, not known. Consequently, those contemporary theories according to which we intuit values are as inadequate as those which hold that values are divinely revealed. In describing moral value Feldkeller frequently, and with approval, quotes Nietzsche. Morality is personal. The moral man is not guided by general rules and the demands of his environment. His motive is not obedience to anything external, be it person or principle. His activity is spontaneous. The formulation of general rules and dogmas results from the evil of objectifying one's value-experiences. Genuineness (*Echtheit*) is the fundamental ethical concept, and it cannot be defined. One can, however, describe it in many ways—one can say, for example, that it involves truth to oneself, that it is more than mere naturalness and more than self-realization.

Feldkeller devotes many pages to love, which occupies an important and special place in Hofmann's theory. He steers between the sensualist and idealist views. In his view, love has two important qualities: it involves desire

[1] *Sinn, Echtheit, Liebe nach Paul Hofmann's Sinn-Analyse.* Berlin: Pan-Verlagsgesellschaft. 1931. Pp. 130.

for another's good, and it involves the expansion of one's own personality. The individual we love has the power to increase our own mental activity. Love contains its own justification. All aspects of its nature reveal its fundamental genuineness. It can give boundless satisfaction even when all material circumstances are unpropitious; it is completely spontaneous and completely indifferent to external sanctions; it is the summit of morality; it is not just one tendency among others, but underlies and influences them all.

The Pan books on philosophy form an interesting series which is still being continued. The sixth, on *Neo-Kantian Tasks*,[1] is by KURT STERNBERG, who, like Feldkeller, is concerned with the present spiritual crisis, but from a neo-Kantian viewpoint. According to him, the present age, demanding a new culture and a new philosophy, attacks the established philosophy, which is neo-Kantianism. Will this philosophy survive? Sternberg does not doubt that its main thesis—the necessity of the critical method in philosophy—is of permanent value. Philosophers will be using the critical method though neo-Kantianism be no more (or even less) than a name. The schools that have sprung up with the present crisis—the phenomenologists and the advocates of philosophies of life—have nothing to contribute which does not presuppose the supremacy of thought. Intuition, though undoubtedly important, depends on discursive thought for its objective validity. But Sternberg is not without hope that much more of neo-Kantianism than the critical method will survive. He surveys the various objections brought against the neo-Kantians and, while he believes some of them to be justified, he regards none as unsurmountable. He entirely repudiates the charge that neo-Kantianism reduces philosophy to methodology, and indulges too much in formalism and logistic. Its emphasis on method is its glory, and method is no mere matter of technique. Each age, it maintains, faces the same problems, but formulates and solves them in a different way. Truth is not given (*gegeben*) but set as a problem (*aufgegeben*). Philosophy is the study of the methods by which problems are formulated and solved. Sternberg agrees, however, that neo-Kantians are unduly hostile to metaphysics—they have wrongly extended condemnation of certain metaphysical theories to condemnation of metaphysics in general. The desire for metaphysical speculation is permanent and must be satisfied. The basis of sound metaphysics is the recognition that its ultimate aim is ethical. Neo-Kantianism has nothing to fear from the natural sciences. It maintains that certain *a priori* principles are involved in all scientific knowledge, and it in no way depends on particular scientific results, which it uses only as examples. But it has not recognized psychology as it should. Psychology is an established science, and the business of critical philosophy is to discover the basis of its validity.

Sternberg's conclusion is that neo-Kantianism must develop if it is to satisfy the needs of the age. It is no bad sign that its schools are breaking up, for this will enable it the better to broaden its activities. For Sternberg, as for other neo-Kantians, philosophy does not occupy a watertight compartment. It is a cultural activity which determines the general mental outlook. The ultimate aim of neo-Kantianism is to bring to life the harmony which it at present lacks. Its fate depends on its success here—and this success can well be achieved even if its schools and its very name be forgotten.

ARTHUR LIEBERT also stresses the cultural value of philosophy in his book on philosophical teaching,[2] which advocates the importance of philosophy in

[1] *Neukantische Aufgaben*. Berlin: Pan-Verlagsgesellschaft. 1930. Pp. 84. RM. 3.50.
[2] *Die "Bestimmung" des philosophischen Unterrichts*. Berlin: Pan-Verlagsgesellschaft. Pp. 32. RM. 1.80.

a general education. And his excellent book, *Kant's Ethics*,[1] is primarily intended, not for specialists, but for all who desire an introduction to the main principles and general character of Kantian ethics. His presentation is clear and illuminating. Like Sternberg, he is concerned with the crisis threatening neo-Kantianism and defends Kantian ethics from the charges levelled against it, in particular the charges of formalism and rigorism. He completely disagrees with naturalistic views. The distinction between what is and what ought to be is irreducible, and Kant's clear recognition of this fact has provided ethics with its necessary basis. Liebert also lacks sympathy with any attempt to make knowledge less abstract—to make it share in the concreteness of life. Knowledge, in his opinion, is necessarily formal and abstract. He believes, however, that Kant is much less formal and rigoristic than his critics maintain. He points out, for example, that Kant emphasizes the difference between natural and ethical laws—the latter being self-imposed demands. Thus it is unfair to accuse him of mechanizing moral life. It is also unfair to criticize the categorical imperative on the ground of its emptiness. The good motive is the basis of Kantian ethics, and a motive is always directed to a concrete end; but to catalogue these different ends is the business of casuistry, not of moral philosophy. Liebert makes two points concerning the alleged rigorism of the Kantian distinction between inclination and duty. In the first place, he claims that Kant is drawing a scientific distinction and has to emphasize distinguishing characteristics even though the two things thus distinguished may be present together. In the second place, Kant believed that conflict was necessary to human life. Ethical thinkers, Liebert maintains, can be divided into two groups. There are those, like Aristotle, who believe that our desires and our duties are fundamentally harmonious. Thus Schiller conceived the idea of the "beautiful soul," the man whose natural inclinations are at one with his duty. On the other hand, there are those, like Kant, who believe in an irreconcilable dualism, who regard human life as a tragic conflict between nature and morality. The distinction is deeply rooted and shows itself in many fields.

Junker and Dünnhaupt are publishing a series of little books on contemporary work in different branches of philosophy. The first of the series is by Walter Passarge on *Contemporary Philosophy of the History of Art*.[2] This subject is intermediate between the theory of art, which deals with general principles, and the history of art, which deals with individual cases. Its purpose is to find general principles under which æsthetic styles can be subsumed. It is accordingly concerned with individual works of art and actual stylistic periods, but it studies them in order to reach generalizations. Passarge is concerned only with German writers. He both emphasizes main tendencies and gives brief expositions of many different theories. His book, which includes a bibliography, would form a very useful introduction to a more intensive study. To the English reader it reveals how enthusiastically the subject is pursued in Germany.

Passarge distinguishes between three main types of theory.

(i) First he considers the group of writers who believe that æsthetic development is purely or mainly internal. They regard form as the essence of art, and believe that formal differences are developed from within and are independent of differences in ideas, culture, race, and so on. The impetus to this, as to so many other movements, was given by Alois Riegl, who explains all formal

[1] *Kants Ethik*. Berlin: Pan-Verlagsgesellschaft. 1931. Pp. 56. RM. 3.50.

[2] *Die Philosophie der Kunstgeschichte in der Gegenwart*. Berlin: Junker and Dünnhaupt. 1930. Pp. v + 101. RM. 4.50.

development in terms of a distinction between 'tactile' and 'optical' periods. The distinction applies to spatial organization. During a 'tactile' period the artist organizes his space in terms of touch—objects, for example, are presented as flat and near at hand. In an 'optical' period sight predominates—consequently, depth and distance are introduced. Heinrich Wölfflin was the first to give central place to formal analysis. He believes that changes of style are determined by changes in the artist's mode of seeing and analyses the differences between classical and baroque art from this point of view. From this analysis he obtains five fundamental pairs of distinctions which he takes to be fundamental categories for the history of art. Wölfflin has stimulated many critics and many followers. Of the latter, Paul Frankl is described as the most important.

(ii) Passarge then considers the opposite type of theory, according to which stylistic differences are determined by some external factor. Different writers select different factors. Some are interested in correlating artistic style with general outlook. They regard meaning as prior to form, believing that a particular kind of meaning requires a particular kind of form. Thus, according to Hermann Nohl, the painter's outlook is not expressed by the subject-matter of his picture, but by its formal construction. Ludwig Coellen combines this type of view with detailed formal analysis, correlating different types of spatial organization with different metaphysical outlooks. Other writers have emphasized factors such as race, culture, climate, and so on. Oswald Spengler, for example, believes that each of the three western cultures which he distinguishes has produced its own distinctive style, and that every style passes through the phases of organic development: childhood, youth, maturity and age. Several writers have interested themselves in sociological studies on the art of the people, which has naturally led to interest in geographical conditions. Kurt Gerstenberg divides Europe into zones and correlates stylistic characteristics with each zone. Thus, for example, in the northern zone, which mainly contains England, Normandy, Norway, and Iceland, the agitated line predominates; in the zone which contains Flanders, Holland, Denmark, North Germany, and the Baltic countries, there is deficiency of plastic sense, but very fine feeling for colour effects and representation of light and air. Max Dvořak believes that a period should be abstracted from its historical context in order to be understood as an individual phenomenon. He applies this method to the development of mediæval art, which he believes to be determined by the tension between ideal and actual. In the early periods overwhelming stress is laid on the ideal. Later the actual is recognized and interest is taken in corporeal forms, not however for their own sakes, but for the sake of their spiritual expression. Cohn-Wiener and Dagobert Frey are among the writers who have been interested in the universal history of style as distinct from the styles of selected periods. The former tries to explain the entire history of style as a rhythmic alternation between 'tectonic' and 'anti-tectonic' styles—the former being designed for use and popular, the latter divorced from purpose and aristocratic. Frey stresses the distinction between successive and simultaneous presentation and regards the development of art as the conquest of the former over the latter. In Gothic art, for example, successive events are presented as though they were simultaneous, and there is no distinction between word and picture, poetry and painting.

(iii) Passarge finally considers a third and very recent type of theory. All the writers so far considered have made generalizations which apply to works of art. But there is a growing interest in the nature of creative personality, and there are writers whose purpose is to obtain generalizations which apply to artists rather than to their works. A. E. Brinckmann believes there are

"typical changes" in the artist's development, and he correlates them with stylistic differences. Wilhelm Pinder is concerned with the cycle of generations, with the opposition between father and son, and the return of the grandchild to the grandfather. He maintains that the style of any period is mainly determined by the simultaneous activity of its different generations, complicated by other factors such as the age and culture of its artists.

HELEN KNIGHT.

NEW BOOKS

Gestalt Psychology. By WOLFGANG KÖHLER, Ph.D. (London: Bell & Sons. 1930. Pp. xi + 312. Price 15s. net.)

The English edition of Professor Köhler's very important book was preceded by an American edition a year earlier, and the book is perhaps written primarily for an American public, if one may judge from the illustrations and examples given, and to some extent the forms of expression employed. Though the paging is slightly different—which is unfortunate—there does not appear to be any essential difference between the two editions.

This presentation for the first time in English garb of the fundamental postulates of *Gestalt* psychology, and of the experimental data upon which its contentions are based, in the form of a systematic development of the *Gestalt* point of view, cannot fail to receive the heartiest of welcomes from English psychologists. The author too is to be congratulated on his admirable English style. Only here and there is there any suggestion that the book has been written by a foreigner. On the whole the style is beautifully clear. There are difficulties of course, but that is a consequence of the nature of the subject-matter and the character of the argument, not the fault of the author.

How are we to regard this new point of view in psychology? How far are the *Gestalt* psychologists making a valuable contribution to psychology? A review of Köhler's argument may perhaps enable us to answer these questions.

Of the ten chapters in the book, the central chapters are the fourth, fifth, and sixth, and again the tenth. These are entitled respectively: "Dynamics as Opposed to Machine Theory," "Sensory Organization," "The Properties of Organized Wholes," and "Insight." The earlier chapters are devoted to destructive criticism directed against current psychologies, and those between the sixth and the tenth to the application of the *Gestalt* conceptions in fields other than sense-perception.

The book begins with a trenchant criticism of the behaviouristic position, to which the first two chapters are devoted, although the author returns to the attack several times in the course of the other chapters. The general trend of the argument against behaviourism in the first chapter is that the behaviourist, in attacking the method of introspection—an attack with which the author in great measure sympathizes—and in his enthusiasm for objective methods in psychology, has committed himself to views regarding 'direct experience,' which would destroy the scientific basis of the physical sciences, as well as introspective psychology. Observation in physics, as in psychology, involves observation of 'direct experience.' The behaviouristic attack on introspective psychology, indeed, which is in itself an attack from an epistemological point of view, ends in "a one-sided and impractical purism in science," with which Köhler will have nothing to do.

In the following chapter the attack on behaviourism is continued, the methods of the behaviourist, as well as the point of view, being challenged. This is really the most damaging part of the criticism. Köhler rightly argues that qualitative observations must precede quantitative experiment in all sciences, and that it is absurd to apply the methods of a developed science like physics in a young science like psychology, to the exclusion of those

qualitative observations, which must define the problems to which quantitative experiment can be applied. Physics as a young science had to proceed in that way, and so must psychology. It must be noted further that the living organism is an incomparably more complex system than any systems investigated by the physicist. In actual fact the blind superficial imitation of physics has led the behaviourist to conceive of the organism as a simpler and cruder system than is the system even of a soap-bubble, which exhibits "functional properties" more varied and more interesting than the "monotony of reflexes and conditioned reflexes."

The author next turns his weapons against those he calls "introspectionists." Who these introspectionists are he does not say, which is very unfortunate, because it would interest not a few psychologists, who are neither behaviourists nor *Gestalt* psychologists, to know whether the views attacked are intended to be their views. If they are so intended, the travesty is such that few of these psychologists will be able to recognize themselves. It would seem as if Köhler had some kind of emotional complex associated with what he calls "meaning," and the violence of his emotional reaction against the "meaning explanation" tends to distort his usual sane outlook. By "introspectionist" does he intend to refer to Titchener, or Stout, or Ward, or James? In any case the views he criticizes are a travesty and a caricature.

'Introspection' Köhler takes as the procedure whereby we "learn to approach actual sensations in such a way that their qualities and laws may be discovered in their true form." What an extraordinarily narrow and perverted view! The great majority of introspectionists, including most of the 'philosophical' and 'rational' psychologists, regard sensations as an abstracted aspect of experience, pretty much as Köhler himself would probably regard them. An illustration of the method of introspection for obtaining pure sensory experience, according to Köhler, is verifying the laws of geometrical optics as regards the size of the retinal area stimulated by objects at different distances, by exposing the objects momentarily by means of a tachistoscope in a darkened room! The observation of "genuine sensory experience by way of introspection," as described by Köhler, seems to exclude any introspection, as understood by everyone else. The idea that illusions have to be *corrected* rather than explained by introspection is surely very strange, and stranger still is the "introspective" method which is used in this correction. It very soon becomes clear that what Köhler is combating is not introspection as understood by most psychologists, but certain experimental results obtained by certain introspectionist psychologists, and the conclusions based on them. To this point we shall return later. It may be granted that much of Köhler's criticism is well founded and valid, when directed against the 'meaning theory' that he is attacking, and most of it is sound enough, when directed against a sensationalist psychology, but it is entirely irrelevant to a discussion of introspection as a psychological method.

The first indications of the lines along which the *Gestalt* psychology is to be developed become apparent in the fourth chapter, though the polemic against behaviourism, introspectionism, and the 'meaning theory' is still continued. This fourth chapter is entitled, "Dynamics as opposed to Machine Theory," as was indicated above. Its argument runs somewhat as follows: Two kinds of factors determine physical events, dynamical factors involved in the processes themselves, and the conditions of the events laid down by the properties of the systems in which they occur. Organic functions in animals and man have, since the time of Descartes, been explained solely in terms of the second kind of factors, that is, special topographical or anatomical conditions. Both behaviourist and introspectionist, so far as their physiological principles

are concerned, agree in adopting this conception as the basis of their theories. They assume that what happens in the nervous system depends upon 'machine arrangements,' inherited or acquired. Sensory experience, therefore, will be completely determined by the conditions of local stimulation, and if conduction between receptor and effector is determined in the same way, an adequate formulation of the psychological problem will be that of the behaviourist—to find what stimuli produce what responses in the effectors. Both the mosaic theory of sense-experience and the stimulus-response theory of behaviour agree in excluding dynamic factors. Both, however, fail to account for the phenomena they set out to explain. In the case of sensory experience organization of the field is a typical fact. In place of local process everywhere corresponding to stimulus we find everywhere evidence of dynamical interaction, which is excluded by the mosaic theory. Hence 'dynamical self-distribution' must be added to topographical arrangements, inherited and acquired, to explain the order and distribution in the sensory field.

This principle of 'dynamical self-distribution' in the sensory field is then the first principle of *Gestalt* psychology. One of the illustrations cited by Köhler is simultaneous contrast in vision. This suggests that the 'dynamical self-distribution' in the case of vision may be an affair of the retina. Such a reading of Köhler's meaning, however, seems inconsistent with views expressed later, which seem to imply that it is a function of the nervous system. Criticism may be postponed, but this point must be kept in mind.

'Dynamical self-distribution' introduces the problem of sensory organization, which is discussed in the following chapter. This is the result of 'dynamical self-distribution' in the sensory field, and this at least is to be regarded as the characteristic achievement of the nervous system. The psychologist of an older generation would have said that this is a characteristic achievement of 'mind,' but it is not usual to speak of 'mind' in psychology nowadays. The important point for the psychologist is undoubtedly in the first instance that sensory organization takes place. The explanation must wait on the ascertained fact. The insistence on the fact of sensory organization in all sensory fields and at all times is one of the chief contributions of the *Gestalt* psychologists to psychological theory. It is perhaps their most characteristic contribution.

In its main lines Köhler's argument is very convincing, so long as we interpret it in terms of sensory dynamics. In most visual fields certain contents belong together, appear as units or wholes separated off from their surroundings. This phenomenon cannot be explained as due to learning from experience. If that were an explanation, wholes would only be separated off so far as they were recognized as known objects. This is not in accordance with facts. We frequently find ourselves asking the question: what is that? about some object in the field of vision, which is not known or not recognized. Numerous examples of this spontaneous grouping in the visual field are given by Wertheimer, who has made an extensive study of the phenomena.[1] The phenomena have also been clearly demonstrated by Hertz in experiments with birds. The phenomena in fact can be taken as definitely established. The general correspondence of the wholes organized by sensory dynamics to things is by no means difficult to explain. Things are either made by man or products of nature. Things made by man are naturally given a form which will make them clearly visible. This means providing clear contours. In the case of natural objects clear contours are due to the fact that there is discontinuity of properties at the boundary separating an object from surrounding objects.

[1] *Psychologische Forschung*, 1923.

It must be emphasized, Köhler repeats, that the light rays do not bring the forms ready made into the organism. The rays of light are quite independent of, and indifferent to, one another. Each local stimulus in the retina is therefore an independent affair. The retina is in fact a mosaic of indifferently related spots. The organization is the work of the nervous system. In the light of this fact the misuse by behaviourists of the word 'stimulus' ought to be carefully noted. An object is frequently called a stimulus. This misuse implies an entire failure on the part of the behaviourist to see the problem of organization. This criticism is a very important one.

From the problem of sensory organization Köhler passes to the consideration of sensory qualities which are the properties of organized wholes—*Gestaltqualitäten*. In the early part of the sixth chapter he shows how the *Gestalt* problem arose in psychology from the examination of the qualities and properties of sensory fields which are necessarily passed over in the analysis of the sensory fields into sensations. Von Ehrenfels first called attention to these qualities. They depend not on single local stimuli, but on several stimuli "having a specific effect in a certain area as such." Qualities like 'turbid,' 'rough,' 'simple,' 'complicated,' 'regular,' 'slender,' 'angular,' 'clumsy,' and the like may be taken as illustrations. These are in fact properties of those segregated wholes which result from sensory organization. They are 'form-qualities'—*Gestaltqualitäten*. And here we come upon a point which requires closer examination, and to which we shall return later. *Some* of these segregated wholes have concrete 'form' or '*Gestalt*' as their most characteristic property. Not all of them! "Real form" presupposes segregated wholes, which in turn depend upon "dynamical self-distribution" in the sensory field. This is the case when we are dealing with perception. But '*Gestalt*' is much wider than sense-perception. It is characteristic of the whole mental life. Wherever it appears, however, it is the product of dynamic factors, not mechanical conditions; it is a property of a dynamical whole.

The above is a brief account of the manner in which the fundamental conceptions of *Gestalt* psychology are developed. Before passing to a critical consideration of Köhler's views we may mention two further points of considerable interest and importance. In the seventh chapter, which bears the title "Behaviour," but has little to do with behaviour as understood by the behaviourist, an interesting point of view is developed, and some of its implications worked out. Briefly the argument is this: All properties of a visual field depend upon physiological processes in the brain and their properties. Whatever is experienced has physiologically a dynamical basis. Relative position, and geometrical relations generally, in the visual field will be represented by corresponding dynamical relations in the aggregate of cells and fibres constituting the brain. Köhler goes farther than this, and maintains that, in some cases, there is direct correspondence of spatial relations in the brain to spatial relations in the visual field, but this is really more than is necessary for his argument. It follows that in the brain, as a physical system, there will be processes corresponding to the bodily members like the arm, the foot, and generally the body as experienced in the visual field—the experienced 'me'—and these processes will be of the same order as the processes corresponding to physical objects in the field, and dynamically external to such processes. It is impossible, therefore, that things should be experienced in 'me' as experienced, any more than that my hand should be experienced as in a pencil or in a book. As far as direct experience is concerned things are 'before' and 'around' me, not 'in' me. From this Köhler passes on to consider how we come to ascribe to others experiences similar to our own, and argues that there is no need to trace this to inference based on analogy, since our

objective experience of the behaviour of others shows us directly something similar to their mental life. In part the argument then becomes a polemic once more against the 'meaning theory.'

The other point is developed in the final chapter. This chapter is entitled "Insight," and is of fundamental importance. The use of the word 'insight' by *Gestalt* psychologists has given rise to a great deal of difficulty, and not a little misunderstanding. This is partly due to the fact that the word is employed in a rather unusual sense, partly to the fact that its use seems to involve a purely intellectualistic psychology, and partly also to the fact that it seems sometimes to carry a meaning which is not consistent with other aspects of the *Gestalt* psychology. It cannot be doubted, however, that so far as *Gestalt* psychology is to be regarded as explanatory, rather than merely descriptive, the concept of 'insight' is fundamental.

Let us see what the teaching is. Köhler begins by contrasting the view of the ordinary man, that he has direct and immediate experience of *why* he has one attitude at one time and another at another, *why* he does one thing at one time and another at another, with the view of certain psychologists that attitudes are taken up, and courses of action pursued, because certain nerve paths are more permeable than others. *Gestalt* psychology, he says, takes the view of the ordinary man. An attitude is always "experienced as depending on something definite." Or, in other words, there is always a real felt relationship between an attitude and its sensory basis. The attitude is felt as "obviously and naturally produced" by a certain experience. "Fright is experienced as jumping at us right out of the nature of certain definite events." The feeling of something naturally depending on something is a feeling of dynamical dependence, and this is what Köhler calls 'insight.' It is not altogether easy to grasp his precise meaning, and it is notorious that several psychologists have entirely missed it. 'Insight' appears to have two aspects, one of which would correspond more or less to 'noetic' process, as understood, for example, by Stout, and the other might perhaps be best characterized as, or designated, 'relevance. 'This second aspect is the one generally emphasized, and it enables Köhler to extend the notion of 'insight' so as to cover emotion, attitude, and action. 'Insight' is experienced determination of this by that, of my feeling as *due* to a certain configuration in the sensory field, of my action as directed towards, and appropriate to, a certain situation, and so on. Hence in 'insight' we have, as it were, that final consummation of organization which characterizes, according to *Gestalt* psychologists, our whole mental life. Dynamical self-distribution, spontaneous grouping, concrete 'form', experienced determination in a context, or 'relevance' —these are the phases of experience which the *Gestalt* psychology emphasizes, or the fundamental principles of *Gestalt* psychology, if we care to put it that way. It might be added that again in the case of 'insight' Köhler returns to his polemic against the 'meaning theory.' He denies that it is possible to explain 'insight' by learning or by the conditioning of the extreme behaviourist.

The precise significance of *Gestalt* psychology as a whole is not very easy to estimate. So far as it professes to be a descriptive analysis of objective experience as such, it undoubtedly makes a strong appeal to the non-behaviourist. The reply to an extreme behaviourism appears conclusive. At the same time it must be noted that the findings of Köhler are, as it were, merely the obverse of the findings of Lashley, as presented in his address to the Yale International Congress.[1] The distance from behaviourism is therefore not so great as it at first seems to be. Köhler and Lashley are in fundamental agreement, though

[1] *Psychological Review*, 1930.

they appear to speak in entirely different languages. Both arrive at a description of the functioning of the nervous system, the one starting with an analysis of the phenomena of objective experience, and the other with a study of the phenomena of animal behaviour, and, as regards the functioning of the nervous system, the phenomena they find are strikingly consistent with one another. They seem in fact to be working at the same problem from different sides. This agreement cannot fail to make us take the findings of *Gestalt* psychology seriously. At the same time it makes imperative an examination of the exact place of the *Gestalt* theories in a systematic psychology.

Lashley rightly emphasizes the fact that psychology is a more fundamental science than neurology. At the present time, and for many years to come, the neurological description can only apply in the most general way to psychological phenomena. The limitations of *Gestalt* psychology, as developed by the school to which Köhler belongs, are equally obvious. Let it be acknowledged at once that their problems are fundamental problems, at least as far as perceptual experience is concerned. At the best the solution of these problems, interpreted as Köhler interprets them, can never give us more than a descriptive psychology of objective experience. So long as this school adheres to the view that psychology is simply the science which seeks to describe objective experience, which is apparently the view held, no explanatory principles can ever emerge. Objective experience is not even the whole of experience. The psychology of the behaviourist, at any rate by implication, is wider than this, and does not exclude the development of explanatory principles. *Gestalt* psychology, from this point of view, appears merely as an introduction to a systematic and complete psychology, which has, as it were, cut itself off from such a complete psychology. If the analysis of objective experience is to lead no farther than the understanding of the structure of objective experience, if it is not going to point the way towards the understanding of animal and human behaviour, we may well agree with the behaviourist that the game is not worth the candle.

The whole tendency of *Gestalt* psychology is towards a narrowly intellectualistic psychology—some might even say an epistemology. This is an almost inevitable result of the emphasis on perception in the first instance, and more fundamentally of the limitation of the scope of psychology to objective experience. There does not seem to be any valid reason why we should decline, even in a young science, to extend our investigation to experience as a whole. The nature and conditions of experience, the phenomena of feeling, emotion, desire, volition, clearly come within the scope of a science of psychology. If this is admitted, it is evident that introspection has a place in psychology more important than that assigned to it by Köhler.

There is also something to be said regarding Köhler's attitude towards 'meaning.' The mental life has two essential aspects. The one we call 'consciousness'; that is, the inside view of the event; the other we call 'intelligence'; but 'insight,' as understood by Köhler, would suit equally well—would suit even better if we extend its meaning as Köhler seems inclined to do. These two aspects are distinguishable, but not separable. All experience involves both. As experience it involves 'consciousness'; as organized in whatever degree, it involves 'insight.' It would follow that such 'real form' as is present is a manifestation of 'insight.' This at once raises a question that has been already referred to. Is dynamical self-distribution in the sensory field a phenomenon of the same order as 'real form,' *Gestalt* in the strict sense? Are segregation and organization one and the same phenomenon? Putting the question in this second form seems to leave no alternative to a negative answer. In the case of local stimulation in the retinal field, as by a patch of colour for

example, the effect produced is not confined to the area of the retina directly stimulated. As a result of sensory dynamics the whole retinal field may be affected. This result may be due to the functioning of the nervous system, but is the phenomenon of the same order as the organization of the sensory field into 'figure and ground'? Similarly with the segregation of wholes arising from definite contours. Is this phenomenon of the same order as the perception of an object or situation? It seems as if there were a considerable gap in the *Gestalt* theory at this point, and it is a gap which can be filled by the conception of 'insight' or some theory of 'meaning.'

Köhler's constant polemic against the 'meaning theory' reminds one very forcibly of Pavlov's continual polemic against psychology in general. In both cases the polemic is justified up to a certain point—against a particular 'meaning theory' in the one case, and against a particular type of psychology in the other. But Köhler's assumption that 'meaning' is necessarily and entirely a product of learning is entirely gratuitous. What if 'meaning' is just that 'relevance' which is the characteristic mark of 'insight'?

In an article published some little time ago[1] in this *Journal*, the present writer wrote: "The organism does not apprehend sensations. It apprehends a situation, with a certain form or configuration, and this situation has a certain *quale*, which is its 'meaning.' To the question: What is the nature of this 'meaning'? the only possible answer seems to be that it arises in the form of a *felt* relation of the situation to the organism. This felt relation appears in the experience itself in the shape of what we call 'interest,' and such form as the situation presents can be explained only as deriving from the same source." In the same article it was argued that 'meaning' arises primarily on the affective aspect of the mental life. There is more than a suggestion in his final chapter that some idea of the same sort has occurred to Köhler. However that may be, the limitations he places on himself effectually prevent its development. He says he has no use for the concept of 'instinct' except in the sense of a chain or pattern of reflexes. Are there no congenital impulsions or 'drives' in animal and human life? Are there no congenital attitudes to which certain situations are 'relevant'?

The general finding would seem to be, on the one hand that the *Gestalt* theory presents a point of view which is in many respects a valuable, though limited, one, and, on the other hand, that *Gestalt* psychology, in proportion as it is consistently adhered to, is merely an introductory chapter in a complete, systematic psychology, as we have already indicated.

JAMES DREVER.

The Philosophy of Art. By C. J. DUCASSE. (London: George Allen & Unwin Ltd. 1931. Pp. xiv + 314. Price 12s. 6d. net.)

The function of art, relatively to the artist, is to express feeling; relatively to the spectator, its function is to impress upon him the same feeling which it originally expressed. Expression here means objectification or objective self-expression: that is, the creation of an object—whether a "real" object or an "imaginary" object, does not matter—capable of "yielding back the feeling of which it was the attempted expression." Moreover, it is a deliberate and conscious activity; not a random objectification of feeling, but an intentional and self-critical objectification. This is the main contention of Professor Ducasse's book, in obvious relationship to such views as Tolstoy's conception of art as communicating feelings and Croce's intuition-expression theory. To

[1] "Meaning as Affective," 1928.

make this clear, these theories are reviewed in the early chapters of the book, together with certain other conceptions of art, connecting it with the Freudian wish, imitation, play, and so forth. These chapters are not critical expositions of Tolstoy, Croce, Schiller, and the rest; they are stepping-stones towards the author's own point of view, and therefore we need not linger over them, beyond saying that they are always clear and concise, and play their part in the book admirably.

The author's grasp upon his own conception is firm, and it is a pleasure to see him applying it to such questions as whether a sigh or a photograph is a work of art; whether the people who read novels for the pleasure of "vicarious adventure" are in the æsthetic frame of mind; whether "empathy" is connected with art; in short, to all cases of the question whether a certain thing is or is not a work of art, whether a certain activity is or is not æsthetic. And the merits of the conception are plain from the justice with which questions of this kind are solved; for they are not solved, as they often might be, by mere deliverances of the author's common sense, they are solved by reference to the theory he is propounding.

Up to a point, then, the author has made good his thesis. In some sense it is true that art is objective self-expression. But there are difficulties which, in my opinion, he has not removed; and the firmness with which he grasps his own theory, and the lucidity with which he has stated it, bring these difficulties into a clearer light. In the first place, what does art express? Not meanings, for then it would be prose instead of poetry, the scientific as opposed to the literary use of language, or in the author's terminology "lectical" instead of "æsthetic art." Not volitions, for then it would be invention, the creation of instruments or means to an end ("heuretic art"). These two things share many of its characteristics with "æsthetic art," being two other species of the same genus; but its differentia lies in the fact that it expresses feelings. Now, the term feeling is harmless, even beneficial, when it is merely an algebraical symbol for "that which is expressed"; but when it takes on a positive meaning of its own, the result is a theory of art whose emphasis lies wholly on emotion; and the corollaries proper to any such theory are accepted without flinching. Sensual pleasure is æsthetic pleasure, and the term beautiful should be applied to Château Laffitte 1870 in exactly the same sense as to the Torso Belvedere; judgment is reduced to taste, which can indeed be modified by experience, but "whether it is then to be described as an educated or as a perverted taste is itself a pure matter of taste"; criticism, except as a mere expression of personal and momentary predilection, vanishes; and the feeling of any given individual, at any given moment, about any given work of art, is an ultimate court from which there is no appeal. Now—it is impossible to argue the matter in a review—these corollaries cannot be accepted without serious reservations. Even Professor Ducasse at times seems uneasy about some of them, for he states them with a passion so unlike his usual cool persuasiveness as to suggest that he is under the necessity of convincing himself against his better judgment, or, at least, that he knows he is preaching paradoxes. For example, he has much to say about the cult of "design" that is characteristic of modern art. So far as this is an exaggeration, he criticizes it effectively; yet in the last resort his criticism fails, because, by his emotionalistic theory, he has deprived himself of the right to criticize at all, except by declaring his emotions, which is not criticizing. He tells us that modern painting invokes the old masters in vain, because what gives the old masters their supreme place is "very obviously their dramatic aspect, and not their design aspect." Here "very obviously" is bluster; it will convince nobody; it merely arouses a suspicion (probably a

quite unworthy suspicion) that he does not appreciate composition. He is indignant because people who claim to understand these things insist upon the supreme importance of design, and assume that those who disagree with them are wrong. His theory makes it impossible for him to refute them, so he can only abuse them; and the term of abuse which he invents is a neologism so nauseating that it only serves to demonstrate the breakdown of his literary taste under the strain of a situation which, if his theory were true, could never have arisen, and with which, because his hands are tied by the theory, he is unable to cope.

In the second place, what is meant by expressing? The author rejects Croce's view that to express our feelings is to intuit them, to arrive at illumination concerning them; he holds, if I understand him, that first (*a*) we have a feeling, then (*b*) we express it, *e.g.* in writing, and only then (*c*), by reading what we have written, do we come to see what the feeling was. Croce would agree that we do not know what we have to say before we say it; but for Professor Ducasse this is not enough; it is not speech that illuminates our minds to themselves, it is subsequent reflexion on the things said. To me, this seems incorrect in fact, and based on insufficient analysis of the relation between "having something to say" and "knowing what it was that I had to say." Two views on this matter seem to be struggling for supremacy in the author's mind: first, one according to which we begin by not knowing what it is we have to say, and secondly, one according to which we begin by knowing it, but knowing it less clearly. There also seems to be an uncertainty in his mind as to whether we really have feelings before we express them: passages occur which imply that we do, but in one passage at least it is said that we do not, for the feeling "develops with the expression" of it. These questions must be settled before we can understand what expression means; and from his treatment of Croce—who, after all, has grappled with them—one doubts if Professor Ducasse realizes their urgency.

A third problem over which the author has perhaps passed too lightly is the relation between art and beauty. Art, he tells us, is not an activity aiming at the creation of beauty, for "we meet with many objects which are undeniably works of art, but which are none the less very ugly." So far, this is like saying that law courts do not aim at doing justice, because many decisions on record are unjust. But, he goes on, we cannot argue that the ugliness proves the failure of the art, because the artist "might well admit the ugliness." He might; people have been known to admit intercourse with the devil; but such admissions are not evidence. Beauty, according to the author, is the pleasantness of the feelings obtained in contemplating an object; and the essence of the æsthetic activity is the contemplating, so that even if the feelings obtained therefrom are painful (*i.e.* the object is ugly), the æsthetic end is still achieved. If that follows, so much the worse for a hedonistic theory of beauty; but does it follow? Does the author think that a specific activity can achieve its proper end without the occurrence of any pleasurable feelings? And if, as surely must be the case, there is a pleasure proper to the æsthetic activity—a pleasant feeling that we are successfully contemplating something—does not this feeling correspond with his definition of beauty?

These criticisms are not intended to cast doubt upon the value, and in the best sense of the word the originality, of the book. It must remain as an admirable example of what can be done with an emotionalistic theory of art by a clear-headed and well-equipped writer; and although there are problems, and important problems, over which its argument seems to break down, it is no small service to the advancement of thought to have worked a theory out

so completely, and to have stated it so lucidly, as Professor Ducasse has done. The text of his book shows that he was making no empty professions in his preface, when he quoted the maxim *citius emergit veritas ex errore quam ex confusione*, and promised to welcome whatever criticisms he should draw down upon himself by an attempt to avoid at all costs "the vagueness and logical looseness which have been the bane of philosophy."

R. G. COLLINGWOOD.

Morals and Western Religion : A Discussion in Seven Dialogues. By JOHN LAIRD, Regius Professor of Moral Philosophy in the University of Aberdeen. (Arnold & Co. 1931. Pp. v + 232. Price 7s. 6d.)

[In asking me to review this book, the Editor of PHILOSOPHY, by way of persuasion, referred to its brevity. Short though it is, it is as full of matter as an egg is full of meat, as a glance at the titles of the Dialogues—Concerning Western Religion, Concerning Ethics, Sacred and Secular, The Sufficiency of Humanism, The Problem of Evil, The Law and Grace, The Metaphysical Aspect—was sufficient to show; and I was finding it uncommonly difficult to give a correspondingly short account either of its spirit or contents. Luckily, when I was on the verge of despair, I heard that two of the characters who appear in the Dialogues, namely J. L. Fixby, Esq., Fellow of Gloucester Hall, Oxbridge, and Dr. G. Munro, Professor of Moral Philosophy in the University of Leuchars, Scotland, had, like "The Persons of the Tale" in R. L. Stevenson's *Fable*, got out of the book, started home from the scene of the Dialogues in California, and begun on the way to compare notes (it was obviously only a beginning) of their impressions of the results. Why! (I thought), if they could talk, they might also be able to write, and one or other of them might have jotted down some notes of what was said. On inquiry I found that this was so, and that the writer had no objection to my using them to get myself out of a scrape. It only requires to be explained, for the benefit of anyone who has not read the book, that the other characters referred to in these notes are Mrs. Anastasia Hacopian, a high-browed Hegelian, Miss Lettice Gotto, a charming Berkeleian, Dr. David Wilson, a Professor in Canberra University, Dr. T. Elder Bowie, Professor of N.T. Exegesis McCheyne Seminary, Dairsie, N.S., and P. R. Duff, Esq., Editor of the *Journal of Metaphysics*, whose strong family resemblance to the Editor of the Dialogues the friends of the latter will hardly fail to recognize. The scene of this reported conversation is the deck-lounge of the s.s. *Aquitania* on the first afternoon out from New York.]

Fixby. Well, Munro, we haven't had a chance in that hectic race across America to catch our boat of a talk about these Dialogues. What did you think of them?

Munro. Dialogues! Dialogue means talk—the kind of thing you and I used to have into all hours of the night and morning in your old rooms in the back quad at Balham. That was talk—conversation, if you like. These weren't conversations; they were conferences. They seem to have lost the art of conversation out there; and I doubt if we'll keep it long with all this organizing—rationalizing the economists call it—*rationing* would be more like it.

Fixby. Right you are! But if you've done grousing about the form of the

things, we can get on to the stuff. What did you think of that? Bully, I should call it, as our Californian friends would say.

Munro. Yes, bully in more senses than one. A lot of it more like pemmican.

Fixby. At any rate, it was washed down with lots of good wit for lack of wine. They're a bright crowd. Mrs. Anastasia was somewhat of a trial with her Hegelian stilts, but Lettice was delightful on her "soothing magnalities"—a flapper if you like, but a flapper of the higher order. It was too bad of Duff to get down on her beloved Berkeley, and that in his own University of Cloyne. But he's sometimes like that—a load of bricks.

Munro. Reinforced concrete!

Fixby (*continuing*). At other times I was a good deal impressed with what he was saying—not of course convinced. Our Author took pretty good care that none of us should show any signs of that. I should never have forgiven him if he hadn't. To be robbed of one's opinions in a book would be more than one could bear. But it's all right to be impressed. I had been reading his books before I went out, and, as you know, he has been bringing Moore and Perry and the whole camdoodle of so-called realists down about his ears over this axiology of his. For so 'cute a critic of other people, I had found his own conclusions somewhat hesitating and hazy "towards a conclusion," as he somewhere says, like the French trains "directing themselves *vers Paris*" rather than booked to arrive. I was all the more curious to hear what he had to say on the subjects set down for discussion, chiefly on ethics and metaphysics, and I thought that I got a move on both by way of clearness and modified agreement.

Munro. I was "impressed" as you call it, and thought I got a move on too, but it was in the opposite direction. Isn't the whole thing rather in a muddle with your "so-called realists"? It's bound to make one think there must be something after all in the old "so-called" Hegelians. They knew at any rate how to hang together to save themselves from hanging separately. But let me hear what you thought you got from him. We've just time before tea comes round.

Fixby. To begin with, I thought that he brought out pretty clearly what he meant by his "deontics", though why he shouldn't be content with old Bentham's "deontology" for a name I don't know—perhaps a bit of his Scotch economy. Leaving that, he wants ethics to be only a part of axiology and not the whole of it, as Moore makes it. On the other hand, he was perfectly right in the dressing down he gave to Wilson, with his "aretaics", that would lift the Sermon on the Mount out of ethics altogether to goodness knows where. *Law* no doubt, in Wilson's sense, he would agree "be damned." But the Sermon on the Mount doesn't abolish law. It only puts it inside: "Be good" for short instead of, or as well as, "Do good." There's no contradiction, as some of my friends in Oxbridge have been trying to make out, in telling people to cleanse their thoughts and improve their motives. The Jesuits knew that in their doctrine of "directing the intention." The way they applied it was damnable, but their psychology was right, as it almost always was. I liked too what he said at the same séance about grace. It rather threw a new light on what people say about his cynicism. He wants grace. But again it isn't to be something coming in from outside. It's the best of a man coming to the top. You may remember what he said to the effect that "a man, high or low, is *all* that he is," and morality claims "the whole man." Grace comes by a new insight into what experience gives us. But he admitted that it comes in all sorts of uncovenanted ways. I was grateful to him for not quoting the "fancy from the flower-bell" and the "chorus ending from Euripides." He had, as usual, telling illustrations of his own, that, for

instance, about new ideals "rising at our feet like a startled bird on the moors." I don't think you can get beyond that with all Bowie's theology. Then at the end on "The Metaphysical Aspect." I thought him rough on Lettice, but he seemed to me to be talking common sense when he said that the one answer to the metaphysical problem of the spiritual nature of the world was contained in "the moral struggle theory," and that Berkeley's idealism, by putting the obstruction inside us, didn't help us there. The question was ethical, not logical or metaphysical.

Munro (*after a silent interval of puffing*). I agree that he cleared up the doubts that some of us had as to where his books (as Miss Gotto would say) dumped us down. But he also confirmed the suspicions I had as to whether he had not dumped us down at a place where nobody wants to go, or at any rate where nobody wants to stay. I am all with him about ethics and the will, though, as he admitted, the will may be a much bigger thing than is commonly supposed. "The mind is the man," and as far as ethics is concerned the mind is the will. And as we have the making of our minds as well as the exercising of them largely in our own hands, so we have the making as well as the exercising of our wills. Our chief job here is in fact to turn them out as good as they are made. But granted Kant's "good will," there is also the question of exercising it—deontics in the narrower sense of doing the right thing or what one ought to do. Duff's axiology, if it means anything, must mean here that what we ought to do is prescribed by what is good to have—what he calls values, and intrinsic at that: so far agreeing with Moore and his Camford followers. But your Oxbridge friends won't hear of that. They tell us we can't get beyond the ought. You can't in the end define the good except as that which you *ought* to have. And so you are in for a ding-dong fight—a kind of University boat-race, with equal odds on each.

Fixby. Why a fight? Why not two independent standards? There are lots of independent things in the world—that porpoise, for instance, out there and your pipe. Why not right *and* good?

Munro. Yes! That might be all right from the point of view of an out-and-out pluralism. But that's not what Duff says. He sees it won't work. We want to do what's right. We don't need to be saints to want that. But it's not always so easy to say what *is* right; we want some rule or principle to guide us, and the only one that can be given is Bradley's (which Duff quotes), namely to do the best we can. Unfortunately this doesn't carry us very far. What do you mean by the best? and how do you know what you can and what you can't do, till you try? In both you have to start with estimating consequences, and these are always merely probable. But probable or certain, you still have to ask consequences for what? It is here that Duff's intrinsic values or dignities come in. We have to realize "certain states of mind," "excellences" as he elsewhere calls them. But he sees that "intrinsic dignity" (for example, in the case of truth-telling) isn't enough, and he brings in as a second string to his bow the "welter of confusion" that would result if we couldn't believe what anybody said. Besides, then, these intrinsic or independent values we have to bring in "relational values," such as "continuity with former acts," justice to others, and the like. He even suspected that this may be the root of the matter, and that "the great majority of duties are of this relational kind." I said at the time that he was like the magician who had made the water flow and then couldn't stop it, and that he had drowned his ethics in an ocean of values. What I ought to have said was that he had drowned the intrinsic, independent values he started out with in an ocean of relationships, and that there is nothing now left to be done but to

fish out the corpses and consign them to Christian burial. Once admit relations as the essence of the business, and you have to admit in ethics as in physics a "framework of reference"—the idea of some whole within which the relations hold. Barring her pomposity, it was this that Anastasia had at the back of her mind in her talk about "integral totalities" and "patterns of the spirit." Apart from something of the kind, you may have some make-shift ethics, but you won't have a moral philosophy. Duff is too much of a philosopher not to feel the tow of what Meyerson or somebody has called "the natural metaphysic of the mind," and somebody else "the spirit of totality." He shows it in all he says about the relatedness of our duties, but he also shows it, if I am not mistaken, in what you quoted from him about grace. We call a thing the work of grace when it is the work of what is best in the "whole man." But where do you find the whole man short of the whole to which he belongs? "Either be a whole or join a whole," Goethe tells us, but nobody knew better than Goethe that you couldn't be a whole without joining one, and that there was none short of *the* whole as something "good and fair," *Deus sive natura*, that could give us what we want. Get into touch with this, have an ear for what it has to tell you of the things of real worth in it, and take that for the law of your life: this is the sum and substance of any genuine axiology. It is no answer to say that these high-sounding generalities are of no more use in telling us what we are to do about a thing, than generalities about the meaning of truth are of use in telling us what to think about it. Even in practice there is more to be said for the maxim "widen and order your thoughts about it" than is commonly believed. But in philosophy we are out primarily for understanding, not for acting. Axiology asks us to understand from the side of the idea of "good," and if the first thing that strikes the axiologist is the multitude of goods, just as the first thing that strikes the ontologist is the multitude of existences, that is only what we might expect. But he can't stop there any more than the other can. An ontology that knows its business must be on the hunt all the time for the *ens realissimum*, and an axiology that is to get us anywhere must be a hunt for the *bonum realissimum*. Whether when they get to understand each other better they will come to see that they both are really talking of the same thing is another question. Plato certainly, and I believe also Kant, held that they will. You would notice that Duff refused to come to grips with this, the real "metaphysical aspect," of all our discussions. Instead of that he side-tracked the issue, set up a bogey Berkeley, and rode off triumphant with its scalp to hang in the editorial office of the *Journal of Metaphysics*. That was why I thought that the whole thing, instead of being "towards a conclusion," left us nowhere at all.

Fixby. I think you are hard on Duff. What he wanted to show was that in the end you have to take your stand in "any future metaphysic," to quote your own Kant, from certain independent, autonomous values which don't need any help from exploded ontologies. Value in fact is one thing, being or existence is another, and so far as I am concerned *Ça me suffit*, or as Lettice put it Sam Suffi.

Munro. Exactly! My answer is, *Ça ne me suffit pas*, and I doubt whether it has ever satisfied or will ever satisfy anyone else that you or others, including Duff, have any respect for as philosophers. But I see that they are bringing round tea. Value and existence, sometimes at any rate, praise the Lord, come together. Perhaps I'll be in a less cantankerous humour after it. Like you, I certainly owe a lot to Duff.

J. H. MUIRHEAD.

Cosmic Problems: An Essay on Speculative Philosophy. By J. S. MACKENZIE, Litt.D., LL.D. (London: Macmillan & Co. 1931. Pp. ix + 122. Price 6s.)

Professor Mackenzie is one of the dwindling few whose presence prevents us from regarding English Hegelianism as a closed chapter. It would be a misfortune if the chapter were to close; neither our need of it nor its own problems are at an end. Its own problems may have been settled in outline, but the solutions still require to be made intelligible and convincing to the non-elect and to be brought into connection with the recent changes in scientific knowledge. And our need of it, or of something like it, is becoming urgent: the "scientific" philosophies now in vogue here are so patchy and prosaic that we ought for our mind's good to keep open before us the vast, coherent, and humanly serious pages written under the influence of Kant and Hegel.

Not being myself an Hegelian, I cannot indicate Professor Mackenzie's position in the school. He maintains that to make the conception of a universe intelligible one must postulate a universal mind. Such a mind would be a system of universals. Since we postulate it to account for the existent world we must allow it creative power. This creative power is really the power to produce at the level of existence a set of particulars correspondent to the antecedent universals. The whole process, which occurs in time, is to be regarded after the analogy of the creative imagining of an artist, except that it is ruled throughout by the idea of the Good. Particular minds are at once the constituents and the expression of the absolute mind, and the attainment of the Good is partly dependent on their initiative and effort. Here arises the question of the compatibility of a determining cosmic plan with human freedom, which is curiously answered by the contention that freedom is the end, not the condition, of a finite mind's progress.

I must apologize for the sketchiness of the above outline, but the book is sketchy. Indeed, I am seriously at a loss to know why the book was written. It is far too wide in scope and short in treatment, and much too allusive, to be intelligible to a beginner, and I can find in it nothing for more advanced students. The admirable plan of the table of contents is an empty promise: even the sections on the newer developments in physics (to treat which is one of the chief purposes of the book) are nothing more than trivial. Trivial too is the frequency of quotation in so very small a book; even for the casual remark that philosophy has no steady development Professor Mackenzie adduces the support of Bosanquet and cites the *locus.* The best idea I can give of the essay is to print the entire section headed "The Objectivity of Value":—

"Some modes of valuation may be held to be purely subjective, though very few are wholly so. There is nearly always some objective ground for the value that we attach to any particular thing or complex situation; and this is emphatically the case with 'the Good' as conceived by Plato. It is not merely something that we *think* good. Even what is intrinsically bad may no doubt be valued—as in the declaration of Milton's Satan, 'Evil, be thou my good.' The paradox in such a saying might, of course, be somewhat mollified by substituting what, I suppose, would be its equivalent, 'Malevolence, be thou my source of Joy.' This would help us to see that the paradox is due to different senses of Value. But the important consideration here is that the sources of valuation are always, in some degree, objective. They are not purely subjective, at least in the sense in which subjective implies arbitrary choice. There are always some real grounds for our preferences, though the grounds may often be obscure or inadequate."

To comminute 119 pages into 66 ambitiously headed sections covering most of the wide field of philosophy is obviously a fruitless enterprise. I

suppose most teachers will share my gratitude to Professor Mackenzie for having provided us with a clearly mapped introduction to ethics, but I fear that neither they nor their pupils will feel a like gratitude for his new book. For a worthier contribution to the stately tradition of idealism they will turn back to his large *Elements of Constructive Philosophy.*

T. E. Jessop.

Locke, Berkeley, Hume. By C. R. Morris. (Oxford: The Clarendon Press. 1931. Pp. 174. Price 6s.)

Mr. Morris has given us in this little book a careful and useful analysis of the course of English empiricism in its three greatest figures. The simple directness of his argument and the ease and fluency of his style should commend him to a wider circle of readers than those whose especial interest is the history of English philosophy. His sections on Locke and Berkeley both in exposition and in criticism are unexceptionable. The arrangement in both cases is well devised to reduce the incoherence and repetition of Locke and the scattered writings of Berkeley to a single continuous argument, with just enough critical comment to distinguish what is of lasting value from what is inadequate or peculiar to each philosopher. One point of detail may be queried. Mr. Morris seems to equate "reflection" in Locke with "mental process," or more narrowly with "reasoning"; he complains, for instance, that in perception there is comparison and distinction, and Locke should admit that these are processes of reflection. But "reflection" in Locke means introspection, and his view is that we can compare and compound the simple ideas given us by sensation or reflection (introspection), but that this activity of comparing is neither sensation nor reflection. If we attend to our comparing, then we are reflecting. This misunderstanding to which our modern use of "reflection" renders us liable is worth pointing out, as it is a trap in other philosophers of the period besides Locke. I find students of Butler often saying "Butler is a rationalist," and quoting "Conscience is a principle of reflection," to confirm this. Here also, however, it is surely clear that reflection means introspection—a faculty as direct and intuitive and non-rational as smell—but one whose objects are mental states and not physical things.

Hume presents greater difficulties, and it is here perhaps that Mr. Morris and his readers are less likely to see eye to eye. Hume is presented as a dogmatic psychologist so convinced of the success of his psychology that he will sacrifice to it not only physical science but also common sense. Mr. Morris suggests that Hume's difficulties about causality can be met by rejecting his account of the origins of belief; but the problem of induction is still the scandal of philosophy, and Hume remains the *locus classicus* for the problem. Even if his solution is inadequate, he first made clear the issue, and his solution itself is surely more than a psychologist's blunder. For, stripped of its psychological accoutrements, it is just that very "descriptive theory" of science which is the favourite theory of scientists themselves down to the present day, and has attracted such followers as Huxley, Mach, and Russell. We feel heartened in our opposition to Mr. Morris on this point when he says that Hume's contributions to logic are a passing reference and a single footnote. The frontiers between logic, metaphysics, and psychology are notoriously debatable, but logic on any view must surely include the presuppositions of induction. Would it not be truer to say that Hume's psychology, like Berkeley's spiritualism, belongs to the old clothes department of philosophy, but that his logic and his metaphysics must be bone of our bone if we are to be

philosophers at all. In this question, however, Mr. Morris is representative of the post-Hume tradition, that sees in him either a sceptic or a subjectivist whose main merit is to plunge in final darkness the English "way of ideas," and so render more dazzling by contrast the dawn of Kant and Hegel. What is still wanted is a critic to expound the positive side of Hume which gives him a good claim to be the greatest logician and metaphysician this country has produced. On a point of detail I should like to suggest an explanation. Mr. Morris quotes: "By the term of impression I would not be understood to express the manner in which our lively perceptions are produced in the soul, but merely the perceptions themselves." He says Hume is distinguishing perceiving from what is perceived, the act from its object. I have always supposed that he is really guarding his readers against taking the word "impression" literally and using the argument that there can only be an impression when there is something that impresses. He is not distinguishing my act of perceiving from what I perceive, he is distinguishing what I perceive from the illegitimately supposed external object (which "impression" might seem to imply).

The only general criticism which suggests itself is a regret that Mr. Morris should have devoted even the few pages he does to the moral and political theories of these authors. For, while Locke and Berkeley can be so dismissed without injustice, their negligible contributions in these fields should not be compared with the brilliant and influential moral theory of Hume.

J. D. Mabbott.

The Animal Mind. By C. Lloyd Morgan, D.Sc., F.R.S. (London: Edward Arnold & Co. 1930. Pp. ix + 275. Price 12s. 6d.)

The Animal Mind is dedicated to the Gentle Reader. To this accommodating person Professor Lloyd Morgan ascribes all the questions which he wishes to answer and all the arguments which he wishes to refute. It is an ingenious way of maintaining a dialogue, but by the end even the very Gentle Reader is likely to complain that he has had all the kicks and none of the ha'pence.

Professor Morgan's aim is to present in a conversational form his views with regard to the characteristics of animal mind. He gives a wealth of illustrations of animal behaviour, including many of his own observations, which were published in his earlier works,[1] and also observations from a wide range of other workers. He discusses a number of problems in his dialogue with the Gentle Reader, and makes clear to him the methodological problems involved in the study of animal psychology, and he treats of several psychological topics in relation to animal behaviour, *e.g.*, Association, Trial and Error, Memory. All this is, however, somewhat by the way. The matter that he has at heart is obviously the old problem, so much discussed between him and his critics, of the relation between instinctive and intelligent behaviour. In the preface Professor Lloyd Morgan says: "In some respects my attitude now differs from what was my attitude then." The view in his earlier work that was most criticized by psychologists was that the first performance of an instinctive activity is purely reflex; that consciousness of the activity comes as a backwash through which improvement occurs on repetition. Stout said: "According to the theory" (Lloyd Morgan's), "intelligence first comes into being only when the instinctive action is repeated on a new occasion with adaptive variation of behaviour determined by past experience. But it is not on the subsequent occasion that the animal first learns the lesson. It is only then that it begins

[1] *Animal Life and Intelligence*, 1889; *Habit and Instinct*, 1896; *Animal Behaviour*, 1900.

to profit by what it has learned. . . . It follows that, if learning by experience is itself an intelligent process, the intelligence involved in instinctive activity cannot be purely an after-effect of learning by experience."[1]

Has Professor Lloyd Morgan modified this view in his present work? It is not easy from the mazes of his communings with the Gentle Reader to extract evidence on this point. The following quotations are the most crucial for the subject.

> "In so far as behaviour is the observable expression of so-called organization in body and mind, its three stages are instinctive, intelligent, and rational. And with them are co-related three stages of mental organization, percipient, perceptive, and reflective" (p. 167).

He includes within instinctive behaviour

> "awareness in behaving, strongly felt urge, subtle nuances of emotional state, swiftly changing percipience,"

but not

> "retrospective reference to what has gone before nor prospective reference to what is coming *some time ahead*" (the italics are the reviewer's).

He holds that there are distinct stages in behaviour, instinctive and intelligent, respectively:—

> "This difference" [in the behaviour of young birds during the first week of life] "is such as to lead me to infer that at some time during the week there is a radical change in mentality; that under observation, there is an advance from instinctive behaviour to intelligent behaviour; and that under imputation there is a co-related step upward from percipience to perception" (p. 137).

It appears from these quotations that Professor Lloyd Morgan has to some degree met his critics. He only denies prospective reference to what is coming *some time ahead*. He thereby allows by implication that there is the prospective reference for which Stout argued. He speaks of "strongly felt urge," whereas formerly he questioned the presence of true conation in instinctive behaviour.[2] It is, of course, possible that he would draw a distinction between this strongly felt urge and "true conation." To the reviewer it does not seem that these concessions help much when Professor Lloyd Morgan still makes a radical cleavage between instinctive and intelligent behaviour and thinks of the latter as supervening at some stage upon the former. Stout's old query is as relevant as ever, and data are at hand which make it more cogent than when he propounded it. For Pavlov found in his work on conditioned reflexes that the animal only "learned" to give the reflex to the conditioning stimulus if he had the "what is it" attitude. Mere performance of the reflex to the original stimulus with which occurred the conditioning stimulus did not lead to the establishment of the necessary links, in the absence of what Pavlov calls the investigatory reflex. Indeed, the whole trend of recent work is to make us question the legitimacy of thinking of any action (apart, perhaps, from the most fundamental organic rhythms) as purely reflex in the sense in which the term was applied in the early days of the instinct-intelligence controversy.

Now that Professor Lloyd Morgan allows the presence of prospective reference and felt urge in the first performance of the instinctive action it may be

[1] Stout, *Manual of Psychology*, 3rd ed., p. 350.
[2] *Instinct and Intelligence*, p. 43, Methuen, 1912.

that the controversy between him and Stout would amount to little more than a logomachy, Lloyd Morgan denying that these factors imply intelligence, Stout saying that they are just the elements which he regards as essential for intelligent action.

VICTORIA HAZLITT.

Reason and Nature: An Essay on the Meaning of Scientific Method. By MORRIS R. COHEN. (London: Kegan Paul, Trench, Trübner & Co. 1931. Pp. xxiv + 470. Price 21s.)

The author is to be congratulated on the remarkable lucidity of this book, which makes it a very good conspectus of philosophy in relation to the sciences and one of great interest for all students whether elementary or advanced. In handling problems he shows a sound and balanced judgment and a sense of the essential. One feels, however, that there are cases where clearness is secured by lack of depth, and that many highly controversial and complicated subjects are treated over-lightly. No doubt the author considered that it would be unwise to extend the length of the book any farther, but it seems to me that it would have been better to deal with certain topics more fully, even at the cost of reserving for a later book discussion of some of the remainder. The sub-title given hardly does justice to the scope and range of the work, which includes such wider philosophical questions as rationalism *v.* irrationalism, indeterminism *v.* determinism, vitalism *v.* mechanism, purpose in evolution, the question of the soul, the distinctive features of the social sciences as compared to other branches of knowledge, natural rights and positive law, and the possibility of a scientific sociology and a scientific ethics. The author is indeed concerned very little in this book with the details of scientific method or any specialist research into the methods of physical sciences, but almost entirely with such greater philosophical issues as those mentioned above.

The wide range of the book itself makes a summary within reasonable limits of space quite impossible. Professor Cohen defends a position of "moderate rationalism," but it must be admitted that his criticism of the modern anti-rationalist tendencies, though very able, is too sketchy to be at all adequate. He also seems to me unfair to W. James in treating him as a pure empiricist and ignoring his doctrine of *a priori* principles as working postulates, by which he radically modifies and limits his empiricism; and he causes much confusion by treating Kant's pure "intuition" as though it were a kind of mystic knowledge and not rather of the nature of sensuous perception. In my opinion the sense in which Kant uses the term "intuition" is so different from that in which it is usually employed by English writers, especially those of anti-rationalist views, that the attempt to treat both together should not have been made, since Kant's view of "intuition" in the sense of *Anschauung* has nothing in common with, *e.g.*, the Bergsonian appeal to instinct as against intelligence. Professor Cohen's much-needed defence of the view that mathematical inference is synthetic, not analytic, and his explanation of the difference between induction and deduction as psychological rather than logical call for the attention of all logicians, as does his ingenious attempt to reduce induction to the syllogistic form—A cure for X, Y and Z is a cure for all pneumonia patients; serum A is a cure for X, Y and Z; therefore serum A is a cure for all pneumonia patients. The issues connected with the terms vitalism, behaviourism, determinism are discussed with great skill. The author himself defends the view of mind and

body as a single unit, neither side of which must be reduced wholly to the other. He is prevented, however, from being fair to the interaction theory by his unjustified assumption that this necessarily implies the view of the soul as a substance in a rather old-fashioned sense of the term. It is difficult to state, or even to ascertain, his own exact position in regard to determinism, for while his separate pronouncements on the subject and his criticisms of other views are clear enough, it is rather hard to fit them together into a whole. He is not satisfied with the arguments for vitalism, and meets them with some very able strictures, while recognizing that the mechanistic view is only an ideal and very far from having been established. He attacks with great skill a number of fashionable views, including the conception that there are unconscious mental processes, and the assumption that nothing is explicable except in terms of its history. His account of the social sciences is specially able and worth reading. He also gives a very interesting account of the possibilities of ethics as a science, but the value of his positive conclusions here is impaired by the absence of any detail. In an appendix he makes a timely attack on the vague eulogistic use of the terms life, experience, reality. Finally, I can only repeat my statement at the beginning that this book is an admirably clear and broad account of some of the chief issues of philosophy. It would be very desirable, however, if it were followed by a more detailed and intensive handling of some of the principal problems discussed.

A. C. EWING.

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CORRESPONDENCE

To the Editor of *Philosophy*.

THE ERRORS OF SIR ARTHUR EDDINGTON: A DEFENCE.

Sir,

In No. 22 of this *Journal* Mr. Norman Campbell has published a series of objections in which he attacks Eddington's concept of modern physics. He performs his intention in such a clever and fair way that the difference is taken away out of a personal sphere and transformed into an objective matter. It is this turn to an objective matter which leads me to take part in this dispute—I myself being one of those who are endeavouring to form a philosophical interpretation of modern physics. I am far from agreeing with all particulars in Eddington's conception, but I must confess that his way of seeing modern theories seems to me to fit experiences so much better than Mr. Campbell's interpretation, that I want to give a defence of Eddington—a defence which indeed much more concerns modern physics than the interesting personality of that prominent English astronomer, who indeed is not attacked by Mr. Campbell, and needs no defence at all.

At the beginning of his criticism Mr. Campbell makes a distinction between physical theory and physical law. I cannot agree with him altogether here, as the difference between these two things seems to me only a matter of degree, and gradual transitions appear at all points. The two principles of Thermodynamics are called physical laws: Thermodynamics is called a physical theory. Classical thermodynamics, however, does not contain essentially more than these two laws, from which all other results are deduced. Usually speaking, a theory is a synopsis of several laws into a system; but as the number of propositions is no definite concept (as according to the way of speaking the same fact may be expressed by one or several propositions), there is no strict frontier between theory and law. Generally speaking, a theory is a system of laws which is not so well guaranteed as laws in a more narrow sense. But remembering that the most primitive laws already contain more than mere observation, it should be recognized that here only a difference of the degree of probability is concerned, and not a matter of principle.

More important than this question are the particular objections which Campbell addresses against Eddington. There are first the well-known illustrations of relativity by application of its concept of time to living beings. Campbell thinks such trains of thought impermissible, as their premises cannot be realized; living beings, for instance, cannot be moved with such velocities as are required in the imagined illustrations given. Therefore it would not be permissible to say what these people would see on such a journey. This argument is unconvincing. We very often make such generalizations, and they have a good sense, because they neglect only some non-essential factors and bring to a clear understanding the essential ones. If you want to describe the influence of a gravitational field on a human body, it is very instructive to relate the story of the man on the moon who emptily jumps like a giant; it is unessential and may be neglected, that men really cannot jump on the moon because there is no atmosphere. Besides, I must confess that I do not think we are entitled to speak of an absolute impossibility. Why one day should not men jump on the moon, enveloped in a rubber-armour and with air-boxes on their back? And why should they not one day fly through the universe in space-vessels and reach velocities at which Einstein's time-dilatation becomes observable? I think we should leave this possibility to the engineers; for science there is a good sense in describing what these people would observe in their strange positions.

But I suppose that Mr. Campbell has other motives in attacking such imaginations. I suppose he is not convinced that living beings would share in the changes which, according to Einstein, atomic watches undergo. Perhaps Campbell does not think it permissible to say anything about this question before such experiments are

performed. But it is to be remembered that it would be a vague hypothesis which assumed that physiological processes were governed by another time than the atomic processes on which they are based. For a fuller exposition I must refer to my book, *Philosophie der Raum-Zeit-Lehre*[1]; surely the much more substantiated hypothesis is that which believes physiological processes parallel to physical processes in their general qualities.

Corresponding answers are to be given to Campbell's objections against Eddington's conception of atomic proportions. Why is it not permissible to say that the interior of matter is comparable to the universal space, as it is indeed not more densely occupied with rigid nuclei than space with stars? Campbell says that "distance" in inter-atomic domains is something otherwise than "distance" between stars, because it is measured otherwise. But this is untenable. We may measure terrestrial distances in many ways without getting different sorts of distance. For instance, the distance between two mountains may be measured by placing rods end on end; or by aiming at the tops with a theodolite from the two ends of a base; or by an aeroplane-photograph which undergoes complicated optical transformations. But it is always the same sort of distance which is measured there. In this sense distances between stars and distances between atoms are of the same sort.

If Campbell further says that matter in the ordinary sense must be represented as solid as is customary, I think Eddington will not object to him. He will only add that this solidity is a rather crude concept, and ought to be represented in a more precise way as the collision of two clouds of dust in which only a few particles enter into the other cloud, and that in the whole repelling forces push the clouds away from each other. Why is it forbidden to say so? It is only maintained by this view that some macroscopic phenomena are better pictures of molecular processes than the usual conception of a continuous matter; and this fact, I think, cannot to-day be seriously denied.

Finally, as to Heisenberg's relation of indetermination, I must say that Mr. Campbell does not see the essential significance of this discovery. It is true that it was not possible for classical physics to determine both the position and velocity of an electron precisely; but the idea was held that improvement of determination to any chosen degree was in principle possible. Heisenberg says that this view is not true, and that there is an objective limit to improvement of exactness. It is unquestionable that our concept of causality receives a shock by this. In substantiating this statement I may refer to the fact that some time before the use of quantum-mechanics I gave a generalization of causality just in the same way and wrote about its philosophical consequences. Heisenberg's discovery appears to me, therefore, as the realization of a philosophical position which is to be drawn quite independently of all physical experiences.[2]

It may be admitted that several popular expositions of modern physics overstep the necessary bounds in figurative interpretation of physical results; but Eddington's expositions do not belong to these, at least in those points which Campbell puts forward. On the contrary, nothing seems to me so urgently required in the present philosophical situation as an unprejudiced interpretation of modern physics. The first necessity in pursuing this aim is a really earnest interpretation of the results of science, and the evaluation of their direct signification for the real world. It is not permissible to call modern physics a world of mathematical concepts which have a sort of mathematical life of their own, remote from the world of physical facts, which may, in the best instances, serve as reckoning aids for experimental physicists. On the contrary, we should know that our world really is structured otherwise than naïve experience believes. As one of those who are earnest in this true interpretation of modern physics, I esteem Dr. Eddington.

Yours faithfully,

HANS REICHENBACH,
Professor of the Philosophy of Physics at the University of Berlin.

May 1931.

[1] Berlin, 1928, de Gruyter, §30.

[2] *Die Kausalstruktur der Welt und der Unterschied von Vergangenheit und Zukunft*, Ber. d. bayr. Akad. d. Wiss. math. phys. Kl., München, 1925, S. 133. Cf. H. Reichenbach, *Ziele und Wege der heutigen Naturphilosophie*, Leipzig, 1931, F, Meiner, and some contributions to *Erkenntnis*, *Annalen der Philosophie*, Leipzig, F. Meiner.

To the Editor of *Philosophy*.

THE RIGHT AND THE GOOD.

Sir,

I have been reading that very excellent book, *The Right and the Good*, by Dr. W. D. Ross, and the review of it by Professor W. G. de Burgh in the April number of *Philosophy*.

On pp. 4, 5, 6 Dr. Ross seeks to prove (by an argument *a fortiori*) the proposition that "morally good" does not *mean* the same as "that ought to be done" by trying to prove that nothing that ought to be done is ever morally good. The latter proposition he thinks follows from the proposition that only acts from a good motive are morally good together with the proposition that action from a good motive is never morally obligatory, *i.e.* action that ought to be done.

For this last proposition he has two arguments. Of the second of these Professor De Burgh writes as follows: "Dr. Ross's second argument is a *reductio ad absurdum*. If the sense of duty is to be my motive for doing a certain act, it must be the sense that it is my duty to do that act. If, therefore, we say 'It is my duty to do act A from the sense that it is my duty,' this means 'It is my duty to do act A from the sense that it is my duty to do act A.' And here the whole expression is in contradiction with a part of itself. The whole sentence says, 'It is my duty to-do-act-A-from-the-sense-that-it-is-my-duty-to-do-act-A.' But the latter part of the sentence implies that what I think is that it is my duty-to-do-act-A simply (*ibid.*). Are we not here again faced by the antinomy which we said was inherent in all moral experience? No particular dutiful act, A, is adequate to express the principle of duty universal which is the moral motive."

The antinomy in moral experience manifests itself here, I gather, in the combination of the two facts, that (1) Dr. Ross's conclusion that action from a good motive is never morally obligatory seems unplausible, while (2) his argument seems impeccable.

To suppose that an antinomy is involved here seems to me to be an instance of the philosopher's habit of turning puns into problems. Dr. Ross's sentence "action from a good motive is never morally obligatory" may mean (α) *It is never true of an action both that it was caused by a good desire and that it ought to be done*, or (β) *Such a sentence as "you ought to comb your hair because of a good desire" never expresses a fact*, i.e. *the characters in respect of which an action is a person's duty never include the character being caused by a good desire*. Not every character of an action which I ought to do is a character *in respect of which* I ought to do it. I ought to go to a meeting forty minutes from now. The character in respect of which my action forty minutes hence will be what I ought to do is the character of *bringing me to a meeting at 4.30 p.m.* The action will in fact have also the character of *increasing my pulse rate to between 80 and 90 beats per minute*. But this is not a character in respect of which it is my duty.

It seems to me that (i) "*prompted by a good desire* is never a character in respect of which an action ought to be done" is true, *i.e.* that proposition (α) above is true; that (ii) Dr. Ross's arguments prove (i); that (iii) Dr. Ross's final conclusion that "morally good" does not *mean* "that ought to be done" does not follow from (i); that (iv) his final conclusion does follow from his arguments for (i); that (v) "*prompted by a good desire* is never a character of an action which ought to be done" is certainly false, *i.e.* that proposition (β) above is false.

It might be argued that Dr. Ross might prove his final conclusion indirectly and via (i) in the following manner: First define the sense in which one character of a thing can be said to be dependent upon another. The beauty of a picture may be said to be dependent upon certain other and first order characters, *e.g.* having parts coloured this way and arranged that way, in respect of which the picture is beautiful. Let us say also that the goodness of a state of mind and the oughtness of an action depend upon those characters in respect of which the one is good and the other ought to be done.

But let us say also that if a thing is beautiful, then that fact about it is dependent not only on its having the characters in respect of which it is beautiful, but also upon its having the characters, if any, which make up the definition of beautiful—say *causing appreciation in the beholder*. Its beauty then depends on its having

those characters in respect of which it is appreciated, and also upon those characters having their due effect on someone.

Similarly the oughtness of an action depends upon those characters which either (*a*) are characters in respect of which it ought to be done, or (*b*) are characters which make up the definition of ought.

If now *prompted by a good desire* is not a character upon which the oughtness of an action depends, it is *a fortiori* not the definition of ought.

But this argument is in a sense circular. Since "C depends on C'," *means* "Either C' is part or the whole of the definition of C, or if x has C, then it has it in respect of C'." And Dr. Ross would, so it seems to me, have done better to proceed directly from his ultimate premises to his final conclusion.

The confusion of these two forms of dependence has caused havoc in Ethics. Two fundamental questions for Ethics are (1) the analysis of goodness, (2) the providing of a list of characters in respect of which things have goodness. (2) is not the problem of what characters in fact accompany goodness, *i.e.* of characters having a correlation of + 1 with goodness, as wrongly asserted by Moore in the *Principia Ethica*. "ϕ is a character in respect of which things have goodness" may be defined as follows. Consider the fundamental sense of "good" which applies to states of affairs or facts. If, for all x, ϕx entails that that fact, ϕx, is good, then ϕ is a character in respect of which things have goodness. For example, *loving* is a character such that if x loves, then there must be something, namely, the very fact that x loves, which is good.

Yours, etc.,
JOHN WISDOM.

THE UNIVERSITY,
ST. ANDREWS,
April 29, 1931.

THE INTERNATIONAL HEGEL CONGRESS.

Readers are invited to participate in the International Hegel Congress to be held in Berlin from Sunday, October 18, to Wednesday, October 21, 1931, to commemorate the centenary of Hegel's death. There will be lectures, social gatherings, and excursions. The fee for participating in the Congress is R.M.10, which will be halved for members of the International Hegel Society and for students. Rooms in hotels from R.M.4 per day. Those who wish to attend the Congress are asked to communicate with Dr. Helfried Hartmann, Berlin-Britz, O.-Bräsigstrasse 34.

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INSTITUTE NOTES

The syllabus for the Session 1931–2 is in course of preparation, and copies will be sent to all members in due course.

The Session which has just closed has again been successful; the lecture courses and evening meetings have been well attended and much valuable work done. Members are asked to do what they can to extend the influence of the Institute by introducing new members for next session.

A Reception of members and friends will be held at 35 Porchester Terrace, London, W. 2, by the kind invitation of Sir Herbert and Lady Samuel, on Wednesday, July 22nd, from 4.30 p.m. to 5.30 p.m. The Reception will be followed by the Annual Meeting.

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(5) Encourages research in Philosophy.
(6) Offers the facility of a Common Room for social intercourse.

Those desirous of becoming members of the Institute are invited to apply for further particulars and forms of application to the Director of Studies, University Hall, 14 Gordon Square, London, W.C. 1.

CONTENTS

PAGE

I. REPRESENTATION: Professor J. L. Stocks 405

II. INTERACTION AND COSMIC STRUCTURE: Professor J. E. Boodin 422

III. DEFINITION OF VALUE: H. Osborne, M.A. 433

IV. SPINOZISTIC SUBSTANCE AND UPANISHADIC SELF: M. S. Modak, M.A., Ph.D. 446

V. CAUSE AND GROUND: F. E. England, M.A., Ph.D. . . . 459

VI. REALITY IN HISTORY: Hilda D. Oakeley, M.A., D.Lit. . . 472

VII. THE CONSTANT AND THE CONTINGENT IN HUMAN THOUGHT AND LIFE: A. E. Garvie, M.A., D.D. 485

VIII. PHILOSOPHICAL SURVEY:

PHILOSOPHY IN ITALY 491

PHILOSOPHY IN RUSSIA 494

IX. NEW BOOKS 498

X. CORRESPONDENCE 525

XI. INSTITUTE NOTES 527

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